

PROGRESS WORKS BY LEAPS AND BOUNDS.

AND YOUR POSITION IS CLEAR: AT THE TOP.

AS A RENOWNED EYE SURGEON, YOU WANT THE BEST OF THE BEST.

FOR YOURSELF. FOR YOUR REPUTATION. AND FOR YOUR PATIENTS.

BECAUSE THERE IS NO ROOM FOR ERROR IN YOUR PROFESSION.

NO UNDERSTANDING FOR MISTAKES.

THERE IS ONLY THE URGE FOR PERFECTION.

THE CHALLENGE TO SUCCEED, EVERY TIME.

THAT REQUIRES STATE OF THE ART MATERIAL.

TOP NOTCH INTERLOCUTORS

KNOWLEDGE OF THE LATEST TECHNOLOGIES

AND UNCOMPROMISING QUALITY.

OPHTALMO IS AS AMBITIOUS AS YOU ARE.

WE UNDERSTAND YOUR DEMANDS,

SHARE YOUR HIGH STANDARDS,

SPEAK YOUR LANGUAGE AND DEFEND YOUR INTERESTS.

THAT IS WHY WE OFFER YOU A WEALTH OF EXPERIENCE,

WE ONLY WORK WITH PREMIUM BRANDS,

WE ARE ALREADY LOOKING FOR TOMORROW'S SOLUTIONS

AND WE TEAM UP WITH OUR PARTNERS TO PRODUCE MORE MEANING AND VALUE.

BECAUSE THERE IS ONLY ONE WORD THAT BELONGS TO YOUR PROFESSION: PERFECTION.



# Ophtalmo, with a clear focus on quality and innovation

Ophtalmo started as a distributor of contact lenses in 1993, and over the years we have developed our wide range of innovative products and technologies for the various segments of the BELUX ophthalmology market.

We are now a major player that offers solutions for cataract, retinal issues, refractive surgery, glaucoma and so on. In addition to diagnostic equipment, instruments and consumables, we also offer a broad and attractive spectrum of viscoelastics and intraocular lenses. Our extensive range of high-quality products has made Ophtalmo the top supplier in Belgium and Luxembourg, where personal service and flexibility are highly valued.

Ophtalmo makes proactive contributions and offers you an innovative eye care approach

We are more than a partner who is knowledgeable. We build lasting relationships with our customers, we genuinely value their feedback and we actively contribute to innovative solutions. We do all this in order to achieve our main goal: to achieve the best patient care. We work with carefully selected partners to strive for the best solution and technology. We offer a specialised portfolio of medical devices, services, supplies and accessories in selected medical fields in order to help create a complete, customised solution.

We only work with suppliers that show exceptional product and service performance levels to ensure we only deliver the best quality, anytime, anywhere. We look ahead, and we don't miss any opportunities to perform even better. We listen to our customers' needs in order to lead the way in the advancement of ophthalmology.

It is our ambition to increase our customers' performance as much as possible

Our close-knit team of experienced staff and network of high-quality suppliers all share the same ambition: to be the number one for our customers. We continue to invest in our business and the right infrastructure, so that we can help our customers in an even better way, with more space, more possibilities and more innovation, now and in the future.

### **DEDICATION**

We are available to our customers 24/7 in order to offer the best care to patients anytime and anywhere.

### RELIABILITY

Customers can rely on us. We respect our promises and the agreed delivery dates.

### **FLEXIBILITY**

As a distributor, we maintain close relationships with our regular suppliers. We monitor everything closely to achieve the shortest possible response times.

### Would you like to find out more about our innovations and projects?

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Founded in 1994, CRISTALENS was initially a distributor of medical devices for cataract surgery. In 2006, the company created its own production unit of hydrophilic and hydrophobic intraocular lenses. In 2008, it has developed a new hydrophobic raw material (phenoxy ethyl acrylate) that allows less than 1.8 mm micro incisions. In 2013, Cristalens received the Industrial Innovation prize with this invention.

By choosing CRISTALENS you are collaborating with a laboratory that has a total mastery of its profession: from raw material production to packaging, with three key words:

Patient safety | Innovation | Proximity



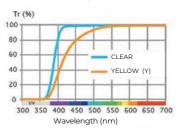
# ARTIS® PLE/YPL

- Fully Preloaded
- Micro-incision
- Proven ARTIS platform
- Yellow-filter available
- Dioptirc power from 0.0D up to +35D



Lens type	For implantation in the capsular bag
Optic diameter	6.15 mm (from 0.0D to +9.5D) 6.00 mm (from +10.0D to +25.0D) 5.80 mm (from +25.5D to +35.0D)
Overall diameter	11.00 mm (from 0.0D to +9.5D) 10.79 mm (from +10.0D to +25.0D) 10.50 mm (from +25.5D to +35.0D)
Design	One-piece square edge on 360°
Optic design	Monofocal Aspherical with negative spherical aberration to partly correct corneal spherical aberration
Angulation	5°
Material	Hydrophobic CBK 1.8 from Cristalens
Dioptric powers	From 0.0D to +35.0D by 0.5D
Estimated A-Constant (SRK-T)	119.3 Ultrasound biometry 119.7 Interference laser biometry
Suggested anterior chamber depth (ACD)	5.77 mm Ultrasound biometry 6.03 mm Interference laser biometry
Refractive index	1.54
Sterilization	Ethylene oxide
Injection system	Preloaded system
Recommended incision size	2.0 mm

### Transmission spectrum





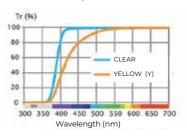
# **EAZ-Y**

- Fully preloaded
- Micro-incision
- Natural yellow filter
- Proven Artis platform
- Dioptric power from 0.0D to +35D



Lens type	For implantation in the capsular bag
Optic diameter	6.15 mm (from 0.0D to +9.5D) 6.00 mm (from +10.0D to +25.0D) 5.80 mm (from +25.5D to +35.0D)
Overall diameter	11.78 mm (from 0.0D to +9.5D) 11.50 mm (from +10.0D to +35.0D)
Design	One-piece square edge on 360°
Optic design	Monofocal Aspherical with negative spherical aberration to partly correct corneal spherical aberration
Angulation	5°
Material	Hydrophobic CBJ 1.8 from Cristalens
Dioptric powers	From 0.0D to +35.0D by 0.5D
Estimated A-Constant (SRK-T)	119.3 Ultrasound biometry 119.7 Interference laser biometry
Suggested anterior chamber depth (ACD)	5.77 mm Ultrasound biometry 6.03 mm Interference laser biometry
Refractive index	1.54
Sterilization	Ethylene oxide
Injection system	Preloaded system
Recommended incision size	2.0 mm

### Transmission spectrum





HYDROPHYLIC MONOFOCAL

# <u>CLARÉ</u>



### Micro-incision

For implantation in the capsular bag
6.00 mm (from +10.0D to +24.5D) 5.70 mm (from +25.0D to +30.0D)
11.00 mm (from +10.0D to +14.5D) 10.75 mm (from +15.0D to +24.5D) 10.50 mm (from +25.0D to +30.0D)
One-piece square edge on 360°
Monofocal Aspherical with negative spherical aberration to partly correct corneal spherical aberration Biconvex
8°
Hydrophilic Benz 25 made of hydrophilic and hydrophobic copolymers
From +10.0D to +30.0D by 0.5D
118.0 Ultrasound biometry 118.5 Interference laser biometry
4.96 mm Ultrasound biometry 5.25 mm Interference laser biometry
1.46
Steam
Single-use injector
1.8 to 2.2 mm

HYDROPHOBIC MONOFOCAL TORIC

# **ARTIS® T PL E**



- Fully preloaded
- Micro-incision
- Proven ARTIS platform
- Dioptric power from +10D to +35D

Lens type	For implantation in the capsular bag
Optic diameter	6.00 mm (from +10.0D to +25.0D) 5.80 mm (from +25.5D to +35.0D)
Overall diameter	10.79 mm (from +10.0D to +25.0D) 10.50 mm (from +25.5D to +35.0D)
Design	One-piece square edge on 360°
Optic design	Monofocal Aspherical with negative spherical aberration to partly correct corneal spherical aberration Toricity and marks on the posterior face, biconvex
Angulation	5°
Material	Hydrophobic CBK 1.8 from Cristalens
Dioptric powers (spherical equivalent)	From +10.0D to +35.0D by 0.5D
Cylinder powers	+0.75D/+1.50D/+2.25D/+3.00D +3.75D/+4.50D/+5.25D/+6.00D
Estimated A-Constant (SRK-T)	119.3 Ultrasound biometry 119.7 Interference laser biometry
Suggested anterior chamber depth (ACD)	5.77 mm Ultrasound biometry 6.03 mm Interference laser biometry
Refractive index	1.54
Sterilization	Ethylene oxide
Injection system	Preloaded system
Recommended incision size	2.0 mm



HYDROPHOBIC MULTIFOCAL

# **ARTIS® SYMBIOSE**

Two complementary profiles

- NEW innovative Technology
- Fully preloaded
- Micro-incision
- Proven ARTIS platform
- Continuous sharp vision from 40-90cm



Lens type	For implantation in the capsular bag
Optic diameter	6.00 mm (from +10.0D to +25.0D) 5.80 mm (from +25.5D to +35.0D)
Overall diameter	10.79 mm (from +10.0D to +25.0D) 10.50 mm (from +25.5D to +35.0D)
Design	One-piece square edge on 360°
Optic design	Diffractive multifocal extended depth of focus with binocular complementarity Aspherical with negative spherical aberration to partly correct corneal spherical aberration  Diffractive pattern on the anterior face, biconvex
Angulation	5°
Material	Hydrophobic CBK 1.8 from Cristalens
Dioptric powers	From +10.0D to +35.0D by 0.5D
Additions (at IOL plane)	MID: Superior intermediate vision - PLUS: Superior near vision
Estimated A-Constant (SRK-T)	119.3 Ultrasound biometry 119.7 Interference laser biometry
Suggested anterior chamber depth (ACD)	5.77 mm Ultrasound biometry 6.03 mm Interference laser biometry
Refractive index	1.54
Sterilization	Ethylene oxide
Injection system	Preloaded system
Recommended incision size	2.0 mm

HYDROPHOBIC MULTIFOCAL TORIC

# **ARTIS® SYMBIOSE TORIC**

Two complementary profiles

- NEW innovative Technology
- Fully preloaded
- Micro-incision
- Proven ARTIS platform
- Continuous sharp vision from 40-90cm





Lens type	For implantation in the capsular bag
Optic diameter	6.00 mm (from +10.0D to +25.0D) 5.80 mm (from +25.5D to +35.0D)
Overall diameter	10.79 mm (de +10.0D à +25.0D) 10.50 mm (de +25.5D à +35.0D)
Design	One-piece square edge on 360°
Optic design	Diffractive multifocal extended depth of focus with binocular complementarity Aspherical with negative spherical aberration to partly correct corneal spherical aberration Diffractive pattern on the anterior face, toricity and marks on the posterior face, biconvex
Angulation	5°
Material	Hydrophobic CBK 1.8 from Cristalens
Dioptric powers (spherical equivalent)	From +10.0D to +35.0D by 0.5D
Additions (at IOL plane)	MID: Superior intermediate vision - PLUS: Superior near vision
Cylinder powers	+0.75D / +1.50D (+2.25D / +3.00D / +3.75D available upon request)
Estimated A-Constant (SRK-T)	119.3 Ultrasound biometry 119.7 Interference laser biometry
Suggested anterior chamber depth (ACD)	5.77 mm Ultrasound biometry 6.03 mm Interference laser biometry
Refractive index	1.54
Sterilization	Ethylene oxide
Injection system	Preloaded system
Recommended incision size	2.0 mm





Rayner manufactured the world's first IOL in 1949, and has remained at the forefront of innovation for 70 years, focused on providing you and your patients with the best IOLs and ophthalmic solutions - always driven by science to improve patient outcomes and safety.

RayOne fully preloaded IOL injection system, designed to deliver without compromise

At Rayner, we believe that the only way to create a true, fully preloaded micro incision cataract surgery MICS) injection system that works consistently without compromise, is to design the system as one – both lens and injector. This was the inspiration behind RayOne.



RayOne Aspheric



RayOne Spheric



RayOne Toric



RayOne Trifocal



RayOne Hydrophobic



OPHTALMO

HYDROPHYLIC MONOFOCAL

# **RAYONE® ASPHERIC**



- Fully Preloaded
- Glistening free
- Proven RayOne platform
- Micro-incision
- Minimal PCO
- Superb concentration

Power range	-10.0 D to +7.0 D (1.0 D increments, inc. plano) +8.0 D to +30.0 D (0.5 D increments) +31.0 D to +34.0 D (1.0 D increments)
Delivery System Type	Fully preloaded IOL injection system
Incision Size	Sub 2.2 mm
Injector Type	Single use, fully preloaded IOL injection system
Nozzle Size	1.65 mm
Bevel Angle	45°
Lens Delivery	Single handed plunger
Material	Single piece Rayacryl® hydrophilic acrylic
Water Content	26% in equilibrium
UV Protection	Benzophenone UV absorbing agent
UV Light Transmission	UV 10% cut-off is 380 nm
Refractive Index	1.46
Overall Diameter	12.50 mm
Optic Diameter	6.00 mm
Optic Shape	Biconvex (positive powers), Biconcave (negative powers)
Asphericity	Anterior aspheric surface with aberration-neutral technology
Optic Edge Design	Amon-Apple 360° enhanced square edge
Haptic Angulation	0°, uniplanar
Haptic style	Closed loop with anti-vaulting haptic (AVH) technology

### Estimated Constants for Optical Biometry

SRK/T	Haigis			HofferQ	Holladay
A-constant	a0	a1	a2	pACD	SF
118.6	1.17	0.40	0.10	5.32	1.56



# **RAYONE HYDROPHOBIC®**



- Glistening free
- Proven RayOne platform
- Micro-Incision
- Superb centration



Power range	-10.0 D to +7.0 D (1.0 D increments, inc. plano) +8.0 D to +30.0 D (0.5 D increments) +31.0 D to +32.0 D (1.0 D increments)				
Delivery System Type	Fully preloaded IOL injection system				
Incision Size	Sub 2.2 mm				
Injector Type	Single use, fully preloaded IOL injection system				
Nozzle Size	1.65 mm				
Bevel Angle	45°				
Lens Delivery	Single handed plunger				
Material	Single piece hydrophobic acrylic				
UV Light Transmission	UV absorption 10% cut-off is 385 nm				
Refractive Index	1.51				
Overall Diameter	12.5 mm				
Optic Diameter	6 mm				
Optic Shape	Biconvex (positive powers), Plano, Concave (negative powers)				
Asphericity	Posterior aspheric surface with aberration-neutral technology				
Optic Edge Design	360° enhanced square edge				
Haptic Angulation	0°, uniplanar				
Haptic style	CornerstoneTM lens design with anti-vaulting haptic (AVH) technology				
Estimated A-constant for optical biometry SRK/T	118.6				
Estimated A-constant for Contact Ultrasound	118.0				



HYDROPHYLIC EDOF



# **RAYONE® EMV**



- New technology
- Fully preloaded
- Glistening Free
- Proven Rayone platform
- Micro-incision
- Minimum PCO
- Superb centration



Power range	+10.0 to +30.0 D (0.5 D increments)
Delivery System Type	Fully preloaded IOL injection system
Incision Size	Sub 2.2 mm
Injector Type	Single use, fully preloaded IOL injection system
Nozzle Size	1.65 mm
Bevel Angle	45°
Lens Delivery	Single handed plunger
Material	Single piece Rayacryl hydrophilic acrylic
Water Content	26% in equilibrium
UV Protection	Benzophenone UV absorbing agent
UV Light Transmission	UV 10% cut-off is 380 nm
Refractive Index	1.46
ABBE	56
Overall Diameter	12.50 mm
Optic Diameter	6.00 mm
Optic Shape	Biconvex (positive powers)
Asphericity	Anterior aspheric surface, posterior surface aspheric or spheric depending on dioptric power
Optic Edge Design	Amon-Apple 360° enhanced square edge
Haptic Angulation	0°, uniplanar
Haptic style	Closed loop with anti-vaulting haptic (AVH) technology

### Estimated Constants for Optical Biometry

SRK/T	Haigis		HofferQ	Holladay	Holladay II	Barrett Unive	ersal II	
A-constant	a0	a1	a2	pACD	SF	pACD	LF	DF
118.6	1.17	0.40	0.10	5.32	1.56	5.32	1.67	0



HYDROPHYLIC MONOFOCAL TORIC

# **RAYONE® TORIC**

- Fully preloaded
- Glistening Free
- Proven Rayone platform
- Micro-incision
- Minimum PCO
- Superb centration
- Excellent rotational stability



Dower range (atom dayed)	Spherical Equivalent (SE)	+8.0 to +30.0 D (increments 0.5 D)			
Power range (standard)	Cylinder Powers	+1.0 D to +6.0 D (increments 0.5 D)			
	Spherical Equivalent (SE)	-9.5 to +34.5 D (increments 0.5 D) (subject to sphere power)			
Power range (made to order)	Cylinder Powers	+1.0 D to +11.0 D (increments 0.5 D)			
Injector Type	Single use, fully preloaded IOL injection system				
Nozzle Size	1.65 mm				
Bevel Angle	45°				
Lens Delivery	Single handed plunger				
Material	Single piece Rayacryl® hydrophilic acrylic				
Water Content	26% in equilibrium				
UV Protection	Benzophenone UV absorbing agent				
UV Light Transmission	UV 10% cut-off is 380 nm				
Refractive Index	1.46				
ABBE	56				
Overall Diameter	12.50 mm				
Optic Diameter	6.00 mm				
Optic Shape	Biconvex (positive powers), (	Convex/Concave posterior surface (negative powers)			
Asphericity	Posterior aspheric surface with aberration-neutral technology				
Optic Edge Design	Amon-Apple 360° enhanced square edge				
Haptic Angulation	0°, uniplanar				
Haptic style	Closed loop with anti-vaulting haptic (AVH) technology				

### Estimated Constants for Optical Biometry

SRK/T	Haigis H			HofferQ	Holladay
A-constant	a0	a1	a2	pACD	SF
118.6	1.17	0.40	0.10	5.32	1.56

HYDROPHYLIC

Trifocal

# **RAYONE® TRIFOCAL**

- Fully preloaded
- Glistening Free
- Proven Rayone platform
- Micro-incision
- Minimum PCO
- Superb centration
- Less halo and glare
- Less light loss



Power range	0.0 D to +30.0 D (increments 0.5D) Trifocal, diffractive, +3.5 D near add and +1.75 D intermediate add at the IOL plane	
Injector Type	Single use, fully preloaded IOL injection system	
Nozzle Size	1.65 mm	
Bevel Angle	45°	
Lens Delivery	Single handed plunger	
	Single piece Rayacryl® hydrophilic acrylic	
Water Content	26% in equilibrium	
UV Protection	Benzophenone UV absorbing agent	
UV Light Transmission	UV 10% cut-off is 380 nm	
Refractive Index	1.46	
ABBE	56	
Overall Diameter	12.50 mm	
Optic Diameter	6.00 mm	
Optic Shape	Biconvex (positive powers)	
Asphericity	Aberration-neutral technology	
Optic Edge Design	Amon-Apple 360° enhanced square edge	
Haptic Angulation	0°, uniplanar	
Haptic style	Closed loop with anti-vaulting haptic (AVH) technology	

# Estimated Constants for Optical Biometry

SRK/T	Haigis H			HofferQ	Holladay
A-constant	a0	a1	a2	pACD	SF
118.6	1.044	0.40	0.10	5.32	1.56



### HYDROPHYLIC TRIFOCAL TORIC

# **RAYONE® TRIFOCAL TORIC**

- Fully preloaded
- Glistening Free
- Proven Rayone platform
- Micro-incision
- Minimum PCO
- Superb centration
- Excellent rotational stability
- Less halo and glare
- Less light loss



Power range	Spherical Equivalent: +6.0 D to +30.0 D (0.5 D increments) Cylinders: +0.75 D, +1.5 D, +2.25 D, +3.0 D, +3.75 D, +4.5 D Trifocal, diffractive, +3.5 D near add and +1.75 D intermediate add at the IOL plane			
Injector Type	Single use, fully preloaded IOL injection system			
Nozzle Size	1.65 mm			
Bevel Angle	45°			
Lens Delivery	Single handed plunger			
Material	Single piece Rayacryl® hydrophilic acrylic			
Water Content	26% in equilibrium			
UV Protection	Benzophenone UV absorbing agent			
UV Light Transmission	UV 10% cut-off is 380 nm			
Refractive Index	1.46			
ABBE	56			
Overall Diameter	12.50 mm			
Optic Diameter	6.00 mm			
Optic Shape	Biconvex			
Asphericity	Aberration-neutral technology			
Optic Edge Design	Amon-Apple 360° enhanced square edge			
Haptic Angulation	0°, uniplanar			
Haptic style	Closed loop with anti-vaulting haptic (AVH) technology			

### Estimated Constants for Optical Biometry

SRK/T	Haigis H			HofferQ	Holladay
A-constant	a0	a1	α2	pACD	SF
118.6	1.044	0.40	0.10	5.32	1.56

HYDROPHYLIC ADD-ON

# **SULCOFLEX**



- Treats Refractive Surprises
- Safe
- Effective
- Predictable
- Easy to use

Sulcoflex Aspheric IOLs are indicated for the correction of any residual pseudophakic ametropia. With the Standard range from –5.0 D to +5.0 D and the Premium range extending from –10.0 D to +10.0 D, Sulcoflex Aspheric IOLs offer an effective option for the resolution of post-operative myopic or hypermetropic refractive surprises.

Model	653L Standard Power Range	653L Made to Order Power Range
Power Range	-5.0 to -0.5 D +0.5 to +5.0 D	-10.0 to -5.5 D +5.5 to +10.0 D
Increments	0.5 D	0.5 D
Optic Diameter	6.50 mm	6.50 mm
Overall Length	14.00 mm	14.00 mm
Haptic Angulation	10°	10°
Optic configuration	Anterior convex, posterior concave	Anterior convex, posterior concave

HYDROPHYLIC ADD-ON

# **SULCOFLEX TORIC**



- Treats Refractive Surprises
- Safe
- Effective
- Predictable
- Easy to use

Sulcoflex Toric IOLs are indicated for the correction of any residual pseudophakic corneal astigmatism.

The implantation of a Sulcoflex Toric IOL offers a precise and reliable alternative to corneal surgery and is available in a range of sphere / cylinder combinations. The unique undulating haptic design improves rotational stability leading to optimal toric corrections.

Model	653T Standard Power Range	653T Made to order Power Range	
Davis Davis	Spherical Equivalent -3.0 to +3.0 D	Spherical Equivalent -3.0 to +3.0 D	
Power Range	Cylinders +1.0 D, +2.0 D, +3.0 D	Cylinders +1.0 D, +2.0 D, +3.0 D	
Increments	0.5 D	0.5 D	
Optic Diameter	6.50 mm	6.50 mm	
Overall Length	14.00 mm	14.00 mm	
Haptic Angulation	10°	10°	
Optic configuration	Arterior convex, posterior concave	Arterior convex, posterior concave	



Rayner — HYDROPHYLIC ADD-ON

HYDROPHYLIC ADD-ON

# SULCOFLEX TRIFOCAL



- Safe
- Effective
- Predictable
- Easy to use
- Elegant solution for presbyopic correction



Sulcoflex Multifocal IOLs are indicated for the correction of pseudophakic presbyopia, thereby significantly reducing the need for additional near correction by the use of spectacles or contact lenses. Based on Rayner's refractive aspheric optic technology, near vision is achieved by the addition of  $\pm 3.5$  D at the IOL plane in a far dominant format.

Model	653F Standard Power Range	653F Made to order Power Range
Power Range	-3.0 to +3.0 D	-7.0 to -3.5 D +3.5 to +7.0 D
Increments	+0.5 D	0.5 D
Addition	+3.5 D add far dominant	+3.5 D add far dominant
Optic Diameter	6.50 mm	6.50 mm
Overall Length	14.00 mm	14.00 mm
Haptic Angulation	10°	10°
Optic configuration	Arterior convex, posterior concave	Arterior convex, posterior concave





Aaren Scientific was founded in 1990 with the goal of developing the most scientifically advanced intraocular lenses (IOLs) and surgical products available for the ophthalmic industry. A pioneer in the use of computer-controlled manufacturing of IOLs, Aaren Scientific has remained dedicated to the science of delivering the highest visual acuity with its IOLs throughout the world. Thus, Aaren continues to develop and maintain a record of achievement and reputation for excellence within the industry.

Aaren employs over 60 people at its FDA-approved, manufacturing facility. In addition to its 2,800-sq. ft. class ISO 7 clean rooms, this facility features 2-shift production, with a 800,000 unit capacity, including a unique production line for "P.U.R.E. System" hydrophilic products. Our exceptional R&D team put Aaren at the forefront of ophthalmic innovation.



— HYDROPHYLIC 3-piece IOL

HYDROPHYLIC 3-PICE IOL

# **AQUA-SENSE® III-130 PAL**



- 3 piece optic
- Aspheric optic

Material	Hydrophilic
Adaptiv <sup>®</sup> Aspheric Optics	
Minimum Incision Size	2.6 mm
Optic Diameter	6.0 mm
Overall Diameter	13.0 mm
Lens Design	3-Piece
Optic Color	Clear
Angulation	5°
A-Constant*	118.2 mm
AC Depth*	5.1 mm
Refractive Index	1.46
Diopter Range (in 0.5D increments)	4.0 to 30.0D





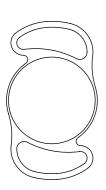
SAV-IOL (Swiss Advanced Vision) is a Swiss Manufacturer of high quality innovative intraocular lenses (IOLs) designed for cataract surgery. Each IOL designed by SAV-IOL incorporates a patented EDOF technology called "Instant Focus." Since 2016, the company has expanded its product portfolio offering cutting-edge solutions for patients worldwide suffering from cataracts. SAV-IOL has three main products; Harmonis, Lucidis, and Eden EDOF IOLs. In 2019, toric versions of both Lucidis and Eden were released to offer astigmatic patients the same advanced vision post cataract surgery.



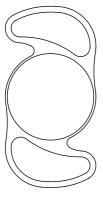


HYDROPHYLIC EDOF

# **LUCIDIS**







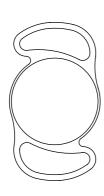
LUCIDIS 124 M ø 12.4 mm

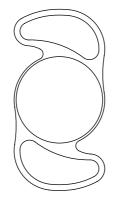
- Up to 2.25 D of extended depth of vision
- New technology
- Fully preloaded
- Glistening Free
- Proven Rayone platform
- Micro-incision
- -Minimum PCO
- -Superb centration

Lens type	Pseudophakic single piece foldable IOL
Power Range	+5.0 to +30.0 D (by 0.5 D steps)
Optical Diameter	6,0 mm
Optic design	Multizone (refractive, aspheric)
Add/EDOF	+3.0 D (nominal value)
UV Protection	Cutoff at 370 nm
Material	Hydrophilic acrylic (26% water content)
Square Edge Design	360° (posterior face)
Haptic Design	Closed loop (0° angulation)
Packaging	Plastic blister
Recommended injector size	≥ 2.2 mm

HYDROPHYLIC EDOF

# **LUCIDIS TORIC**





LUCIDIS 108 M ø 10.8 mm

LUCIDIS 124 M ø 12.4 mm

- EDOF technology
- Advanced refractive optical surface
- Patented Instant Focus technology
- Continous Near-Intermediate vision
- · Low loss of light
- Low dysphotopsia

Lens type	Pseudophakic single piece foldable IOL
Power Range	+5.0 to +30.0 D (by 0.5 D steps) Cyl.: 1.00 / 1.50 / 2.25 / 3.00 / 3.75 / 4.50 D
Optical Diameter	6,0 mm
Optic design	Multizone (refractive, aspheric)
Add/EDOF	+3.0 D (nominal value)
UV Protection	Cutoff at 370 nm
Material	Hydrophilic acrylic (26% water content)
Square Edge Design	360° (posterior face)
Haptic Design	Closed loop (0° angulation)
Packaging	Plastic blister
Recommended injector size	≥ 2.2 mm





Caregroup is a leading manufacturer and exporter of Intraocular Lenses and Ophthalmic Pharmaceuticals, with lenses implanted globally, across countries.

IPCL V2.0 iol's have a special patterned hole on upper left corner to ensure proper direction of the lens while loading in the cartridge .When unfolding inside the eye, the anterior side of the lens is facing upwards. Its innovative six haptic pads ensures better stability in the ciliary sulcus. IPCL V2.0 have a unique hole in the centre of the optic for proper aqueous flow. The size of the hole is 380 micron. This hole is designed by unique engineering pattern to minimize light scattering and glare and does not induce significant visual disturbances.

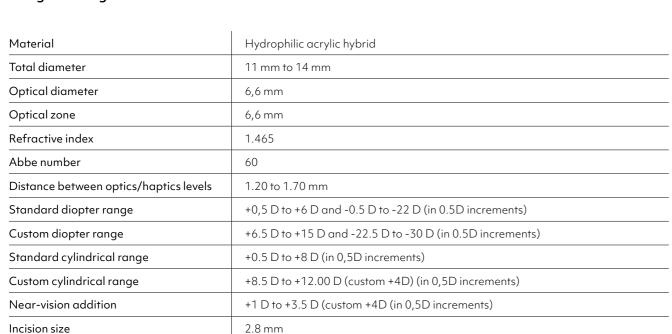


HYDROPHYLIC PHAKIC IOL

# **IPCL V2.0**



- · Easy loading No extra instruments needed
- Small incision
- Highest range available from +15D to -30D





# **IPCL V 2.0 TORIC**

- · Highly biocompatible
- Easy loading
- No extra instruments needed
- · Small incision

Online Calculator

- Highest range available from +15D to -30 D.
- Cylinder correction up to 10D

Material	Hybrid Hydrophilic Acrylic
OL Powers (Spherical Equivalent Diopters)	-1.00 to -30.00 D, + 1.00 to + 15.00 D (in 0.5 D Steps)
OL Cylinder Power	+0.50 D to +10.00 D (in 0.5 D Steps)
Addition for Near Focus	+1.00 D to +4.00 D in 0.5 D Steps )
Optie Diameter	6.60 mm (It can be customized upto 7.5 mm)
Overall Length	11.00 to 14.00 mm (in 0.25 mm Steps)
Optie Type	Aspheric
Vault Height	1.2 mm to 1.8 mm
Refractive Index	1.465

http://www.ipcliol.com/calc







HYDROPHYLIC PHAKIC IOL

# **IPCL V 2.0 PRESBYOPIC**

- Highly biocompatible
- Easy loading
- No extra instruments needed
- Small incision
- Highest range available from +15D to -30D
- Presbyopic add up to +4D
- Patented refractive-diffractive optic profile



Material	Hybrid Hydrophilic Acrylic	
IOL Powers (Spherical Equivalent Diopters)	-1.00 to -30.00 D, + 1.00 to + 15.00 D (in 0.5 D Steps)	
IOL Cylinder Power	+0.50 D to +10.00 D (in 0.5 D Steps)	
Addition for Near Focus	+1.00 D to +4.00 D in 0.5 D Steps )	
Optie Diameter	6.60 mm (It can be customized upto 7.5 mm)	
Overall Length	11.00 to 14.00 mm (in 0.25 mm Steps)	
Optie Type	Aspheric	
Vault Height	1.2 mm to 1.8 mm	
Refractive Index	1.465	
Online Calculator	http://www.ipcliol.com/calc	

HYDROPHYLIC PHAKIC IOL

# **IPCL V2.0 PRESBYOPIC TORIC**

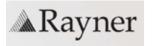
- Highly biocompatible
- Easy loading
- No extra instruments needed
- Small incision
- Highest range available from +15D to -30D
- Cylinder correction up to 10D
- Presbyopic add up to +4D
- Patented refractive-diffractive optic profile



Material	Hybrid Hydrophilic Acrylic
IOL Powers (Spherical Equivalent Diopters)	-1.00 to -30.00 D, + 1.00 to + 15.00 D (in 0.5 D Steps)
IOL Cylinder Power	+0.50 D to +10.00 D (in 0.5 D Steps)
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Optie Type	Aspheric
Vault Height	1.2 mm to 1.8 mm
Refractive Index	1.465
Online Calculator	http://www.ipcliol.com/calc







# OVD

# **COHESIVE <**



# > DISPERSIVE



# + SORBITOL



Reduces endothelium cell death by an avarage 28,4%





VISCOELASTIC — COHESIVE ARayner

COHESIVE

### COHESIVE

# **OPHTEIS 1%**







### Cohesive • Designed for each stage of cataract surgery

- High molecular weight resulting in high viscosity and pseudoplasticity.
- High cohesion, meaning that it creates space, stabilizes the eye and facilitates movement of tissue.
- High pseudoplasticity enables easy and controlled injection and IOL implantation.
- Easy to remove as a single mass at the end of surgery.

Polymer Origin	Animal origin
Sodium Hyaluronate Concentration	1%
Molecular Weight (Dalton)	avg. 5 million
Zero Shear Viscosity (mPas)	avg. 1 million
Osmolality (mOsm/kg)	310
рН	6.8 - 7.6
Shelf Life (years)	3
Storage	2 to 25°C
Syringe volume (ml)	0.55 / 0.85
Cannula Gauge (G)	27

### Highly Cohesive • Designed for difficult cases

- Super high molecular weight, pseudoplasticity and cohesion provides maximum intraocular stability, while creating space during capsulorhexis.
- Reliable in more difficult cases such as trauma and refractive surgery.
- Excellent performance during IOL implantation.
- Super high pseudoplasticity provides a product easy to inject and is removed as a single mass after surgery.

Animal origin
1.4%
avg. 5 million
avg. 3.3 million
320
6.8 - 7.6
3
2 to 25°C
0.55 / 0.85
27





VISCOELASTIC VISCOADAPTIVE

A Rayner

VISCOADAPTIVE

# **OPHTEIS MAX**



### Visco-Adaptive • Designed to adapt to the different stages of surgery

- Viscoadaptive; at rest, it adopts cohesive characteristics (e.g. during capsulorhexis), and under stress it behaves in a dispersive way (e.g. during phacoemulsification.
- Excellent all round product that can also be used for advanced cases and trauma.
- Combines both high and low molecular weight hyaluronic acid.
- Easy to remove as a single mass at the end of surgery.

Polymer Origin	Animal origin
Sodium Hyaluronate Concentration	2.5%
Molecular Weight (Dalton)	avg. 4 million
Zero Shear Viscosity (mPas)	avg. 1 million
Osmolality (mOsm/kg)	360
рН	6.8 - 7.6
Shelf Life (years)	3
Storage	2 to 25°C
Syringe volume (ml)	0.85
Cannula Gauge (G)	25





VISCOELASTIC

COHESIVE-DISPERSIVE Rayner

COHESIVE-DISPERSIVE

# COHESIVE-DISPERSIVE

# **OPHTEIS BIO 1.6**

# **OPHTEIS BIO 1.8**



### Highly Cohesive • Designed for difficult cases

- Optimal maintenance of volume in the anterior chamber or capsular bag.
- Good coating power.
- Easy injection and removal during surgical stages.

Polymer Origin	Biofermentation
Sodium Hyaluronate Concentration	1.6%
Molecular Weight (Dalton)	approx. 3 million
Zero Shear Viscosity (mPas)	avg. 400,000
Osmolality (mOsm/kg)	300 to 350
рН	6.8 - 7.6
Shelf Life (years)	3
Storage	2 to 25°C
Syringe volume (ml)	1.1
Cannula Gauge (G)	27



### Cohesive • Designed for small incision

- Good cohesivity at low shear-rate for a stable anterior chamber
- Strong coating of tissue thanks to improved dispersive property.
- · Easy to aspirate with high molecular weight.

Polymer Origin	Biofermentation
Sodium Hyaluronate Concentration	1.8%
Molecular Weight (Dalton)	approx. 3 million
Zero Shear Viscosity (mPas)	avg. 600,000
Osmolality (mOsm/kg)	300 to 350
рН	6.8 - 7.6
Shelf Life (years)	3
Storage	2 to 25°C
Syringe volume (ml)	1.1
Cannula Gauge (G)	27





DISPERSIVE

# **OPHTEIS BIO 3.0**

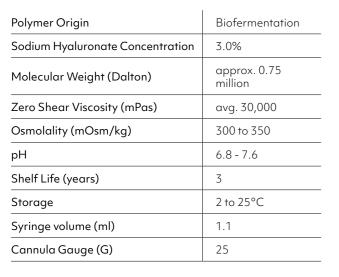


# OPHTEIS METHYLVISC



### Dispersive • Designed for excellent endothelial protection

- Low molecular weight, high NaHA concentration.
- · Assures maximum protection and viscosity.
- Good maintenance of anterior chamber.





Methylvisc is made from the synthetic molecule Hydroxypropyl Methylcellulose (HPMC) and provides excellent endothelial protection thanks to its viscoadhesion.

- Good maintenance of the anterior chamber depth while providing perfect protection of intraocular tissues.
- Easy removal of the product from the anterior chamber.
- · Satisfactory transparency.

Polymer Origin	Synthetic molecule		
HPMC Concentration	2.0%		
Osmolarity (mOsm/kg)	300 to 390		
Zero Shear Viscosity (mPas)	10,000 approx.		
pH	6.8 - 7.5		
Shelf Life (years)	3		
Storage	2 to 25°C		
Syringe volume (ml)	2		
Cannula Gauge (G)	23		
Cannula Gauge (G)	25		





CONTAINING SORBITOL



# **OPHTEIS FR PRO**

### Introducing Ophteis FR Pro

We've put a lot of fresh thinking into our new Ophteis FR Pro. It's a unique bio-engineered Visco-Surgical Device (OVD) containing free radical scavenging sorbitol – designed to deliver a new level of corneal endothelial protection from phaco induced trauma.



Sorbitol acts as an outstanding free radical scavenger, neutralising reactive oxygen species during surgery that causes damage to the endothelium. In fact, when compared to market leading OVDs, studies show that the use of Rayner's Ophteis FR Pro reduces cell death by an average of 28.4%\*.



### Visco Cohesive • Designed to deliver a new level of corneal endothelial protection

- The ONLY OVD with sorbitol free radical scavenging.
- Proven to reduce cell death by an average of 28.4% when compared to market leading OVDs.\*
- Unique bio-engineered composition of NaHA and sorbitol transforms the 2% NaHA dispersive solution into a viscous cohesive.
- A larger 1.2 ml syringe gives you the confidence that Ophteis® FR Pro will support all elements of your cataract procedure.
- With its stable rheology at room temperature you will enjoy consistent performance for every procedure.
- Ophteis® FR Pro is designed to protect the endothelium, provide excellent chamber maintenance and is fully validated with all Rayner IOLs.

Polymer Origin	Biofermentation
Sodium Hyaluronate Concentration	2.0%
Sorbitol Concentration	4.0%
Molecular Weight (Dalton)	1.8 million
Zero Shear Viscosity (mPas)	avg. 500,000
Osmolality (mOsm/kg)	295 to 355
рН	6.8 to 7.4
Shelf Life (years)	2
Storage	2°C to 25°C
Syringe Volume (ml)	1.2 ml
Cannula Gauge (G)	27





CONTAINING MANNITOL



# **VIVACY I.SPACE**

Laboratoires VIVACY introduces I. SPACE®: a new generation of viscoelastic intraocular hyaluronic acid based gel with the natural antioxidant mannitol specifically designed for anterior segment surgery, protection of the corneal endothelium and maintenance of the intraocular space.

This advanced Antioxidant Formula maintains a perfect balance between cohesive and dispersive properties of the gel, thus ensuring successful surgical outcomes for both the surgeon and the patient:

I.SPACE® is an exclusive composition of pure high molecular weight (2,2Mda) hyaluronate sodium (15,5mg/g) with mannitol. I.SPACE® is also very well adapted for micro-incision surgery and for patients with hard nucleus cataracts.



### ANTIOXIDANT ACTION

Ensures the stability of the protective properties of I.SPACE® on the corneal endothelium throughout the surgery in the presence of oxidative stress induced by free radicals.

### **MECHANICAL ACTION**

Maintains the rheological properties of HA much more stable, thus guaranteeing a safer and easier procedure. Creates and provides excellent space maintenance.

### **ADVANTAGES OF I.SPACE®**

- Excellent pseudoplasticity of I. SPACE® makes it easy to inject, allowing the gel to adapt to a new environment: the surgeon can safely manipulate delicate intraocular tissues and intraocular lenses (IOLs).
- Optimal adhesiveness of the gel allows a very good coating, secures the capsulorhexis and protects the intraocular tissues.
- High viscosity enables an effective maintenance of the intraocular space and a deep anterior chamber. (However, it is not more than 250 Pa.s at rest in order to avoid expulsion of the product from the capsular bag and the anterior chamber during the surgical steps).
- Optimal viscoelasticity provides resistance against deformation, protection from vibrating instruments and other mechanical stress: very effective protection of intraocular structures.
- Excellent cohesiveness allows the material to be easily removed from the eye at the end of the surgical procedure, thus preventing increase of intraocular pressure (IOP) post op.







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# **I/A INSTRUMENTS**

# REUSABLE SWISS BIMANUAL I/A SYSTEMS, NON-STERILE

The Medicel bimanual I/A systems can be combined in various configurations. All models are made of titanium. Thanks to the aeroplane-nose design, cannulas can be introduced easily through the smallest of incisions.

consisting of: Aspiration Instrument (Box of 1)



IRRIGATION/ASPIRATION

### I/A ASPIRATION INSTRUMENTS

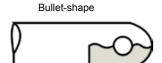
ITEM CODE	SIZE	INCISION SIZE	ASPIRATION CANNULA	ASPIRATION PORT	ASPIRATION HEAD
SBA100A	21G / 0.8mm	1.1mm	aeroplane shape	0.35mm	polished
SBA103A	21G / 0.8mm	1.1mm	aeroplane shape	0.40mm	polished
SBA104A	21G / 0.8mm	1.1mm	aeroplane shape	0.40mm	textured
SBA105A	21G / 0.8mm	1.1mm	aeroplane shape	0.35mm	textured
SBA101B	23G / 0.6mm	0.8mm	bullet shape	0.30mm	polished
SBA106B	23G / 0.6mm	0.8mm	bullet shape	0.30mm	textured

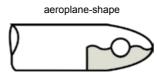
consisting of: Irrigation Instrument (Box of 1)

### I/A IRRIGATION INSTRUMENTS

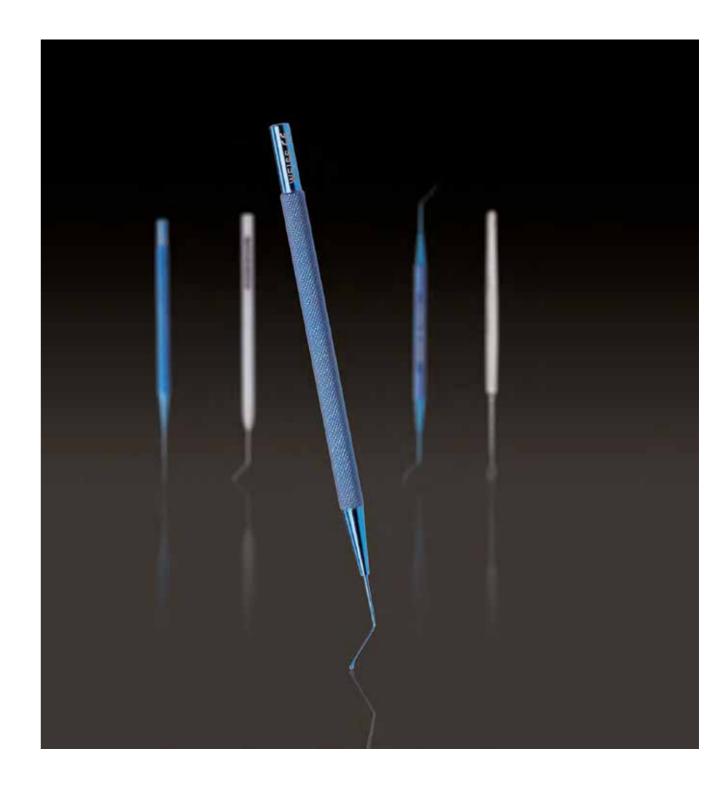


ITEM CODE	SIZE	INCISION SIZE	IRRIGATION CANNULA	IRRIGATION PORT	IRRIGATION HEAD
SBI120A	21G / 0.8mm	1.1mm	aeroplane shape	2 ports, 0.45mm	polished
SBI125A	21G / 0.8mm	1.1mm	aeroplane shape	2 ports, 0.45mm	textured
SBI121B	23G / 0.6mm	0.8mm	bullet shape	2 ports, 0.30mm	polished
SBI126B	23G / 0.6mm	0.8mm	bullet shape	2 ports, 0.30mm	textured

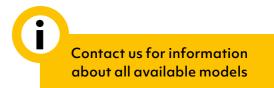




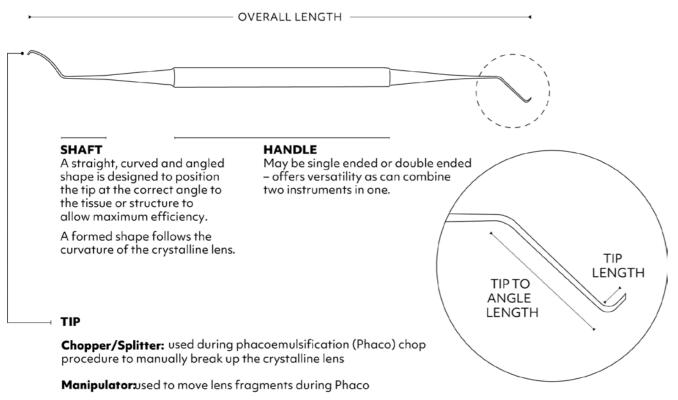
# **CHOPPERS - MANIPULATORS - SPATULAS**







### **CHOPPER AND MANIPULATOR ANATOMY**



CHOPPERS - MANIPULATORS - SPATULAS

Dialer: used to position the Intraocular lens implant (IOL)

Hook (micro):designed to 'push' or 'pull' the iris or lens capsule

Vectis: a traditional instrument designed to support the crystalline lens and aid with its removal during intracapsular cataract extraction.procedure

**Repositor:**used to reposition tissue, usually iris. May also be used to separate adhesions (synechia) between the iris and lens capsule.

### **DRYSDALE**

Drysdale nucleus manipulator, angled with a paddle tip.

11mm tip to angle, overall length 112mm



### **ROSEN NUCLEUS**

Rosen nucleus manipulator, angled with a paddle tip.

10mm tip to angle, overall length 120mm



### **ROSEN**

Phaco Splitter

wedge-shaped inferior edge

blunt tip

K3-2395 inline wedge, standard **K3-2396** 60° offset wedge,

for use in left hand



K3-2396



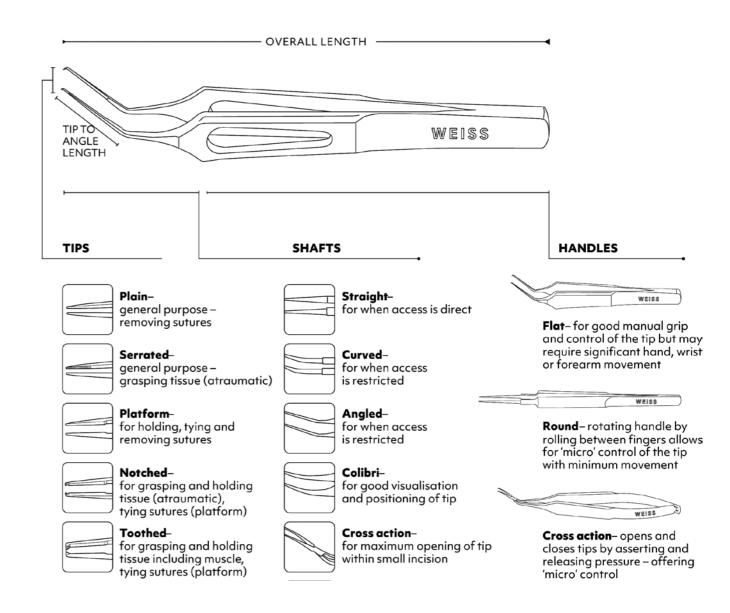




# **FORCEPS**



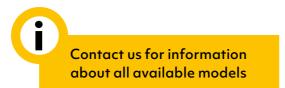
### **FORCEPS ANATOMY**











FORCEPS

### **BONN**

Forceps

1x2 teeth, 0.12mm with tying platform





### **UTRATA**

Capsulorrhexis Forceps very delicate, short handle

triangular grasping tips

extremely thin with landmarks at 2.5mm and 5.0mm

**K5-5071** straight



### MICS CAPSULORRHEXIS **FORCEPS**

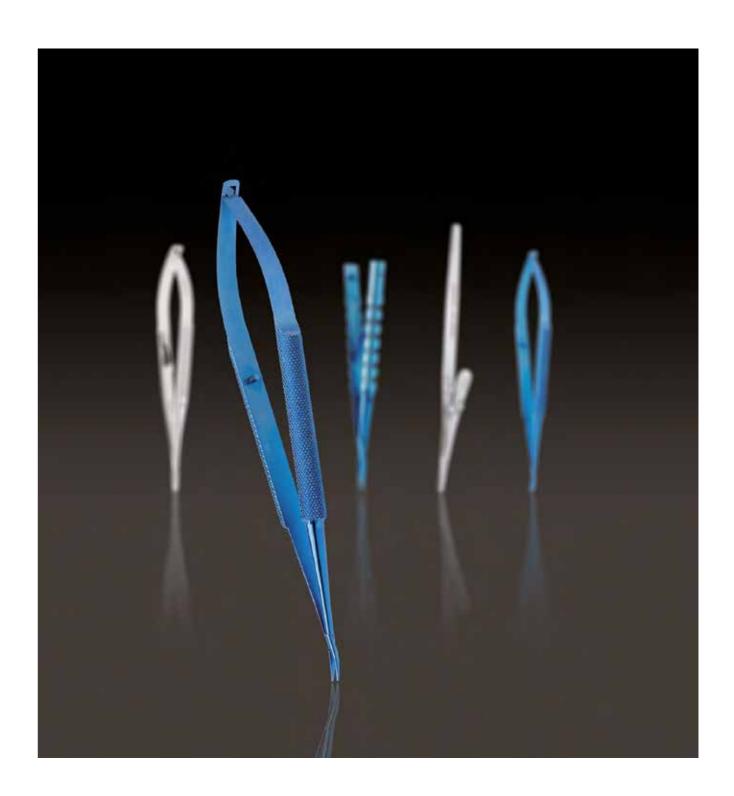
23 gauge curved shaft with short micro-grasping tips

Designed for use through a very small paracentesis.

**K5-7651** Alio K5-7655 Fine-Ikeda



## **NEEDLE HOLDERS**

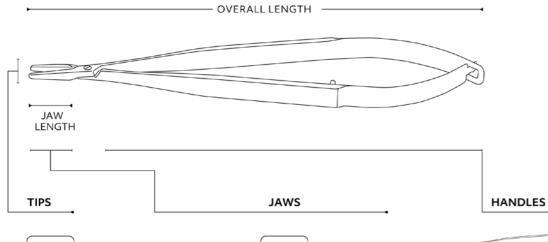




Contact us for information about all available models

## **NEEDLE HOLDERS**

### **NEEDLE HOLDER ANATOMY**











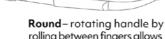
Choice depends on users preference although curved may give better visualisation of the wound

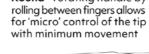
Curved



Flat – for good manual grip and control of the tip but may require significant hand, wrist or forearm movement

NEEDLE HOLDERS





Catch option—this is used to lock the jaws in the closed position—securing the needle during suturing

### **MCPHERSON**

very delicate jaws

K6-1000	straight jaws, with lock
K6-1010	straight jaws, without loc
K6-1020	curved jaws, with lock
K6-1030	curved jaws, without lock



### **CASTROVLEJO**

delicate jaws

K6-1500	straight, with lock
K6-1510	straight, without lock
K6-1520	curved, with lock
K6-1530	curved, without lock





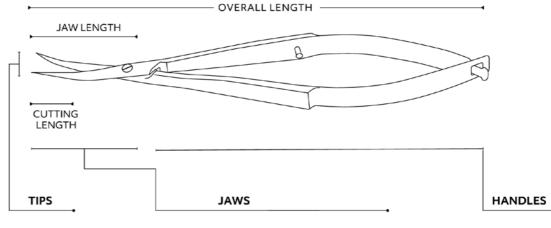
SCISSORS



## **SCISSORS**



### **SCISSORS ANATOMY**



Sharp/pointed-can pierce tissue as well as cut

Roundedfor cutting only

Straight– good for when direct access is available or when a straight cut is required

Curved-

to reach more difficult areas or when a curved cut is required. May allow better visualisation of tips

Angled– enables blades to be positioned at the correct angle to the tissue, particularly useful when excising

**Spring**– a good manual grip with excellent control of the tip means that these are the best choice for delicate work.

Bow or ribbon – traditional design, good utility scissor or for non-delicate excisions such as extraocular. May require significant hand and wrist movement.



**Hinge**– a time tested design, blades close by squeezing handle together. Generally used for iris excision.









### WESTCOTT

Tenotomy Scissors blunt tips, standard blades curved

**K4-3100** right (shown)

**K4-3110** left



### CAPSULOTOMY SCISSORS

### **VANNAS**

5mm long blades, sharp tips

**K4-5000** straight **K4-5010** curved **K4-5020** angled forward

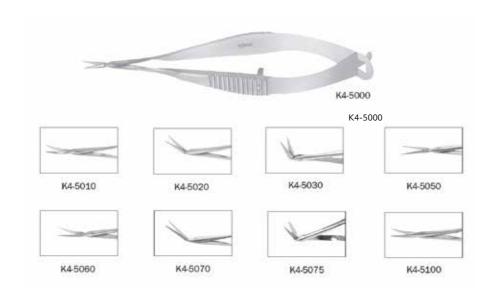
**K4-5030** angled to side

### **GILLS-VANNAS**

7mm long blades, sharp tips

**K4-5050** straight **K4-5060** curved

**K4-5070** angled forward



### **HOLLAND DALK SCISSORS**

4.5mm angled blades

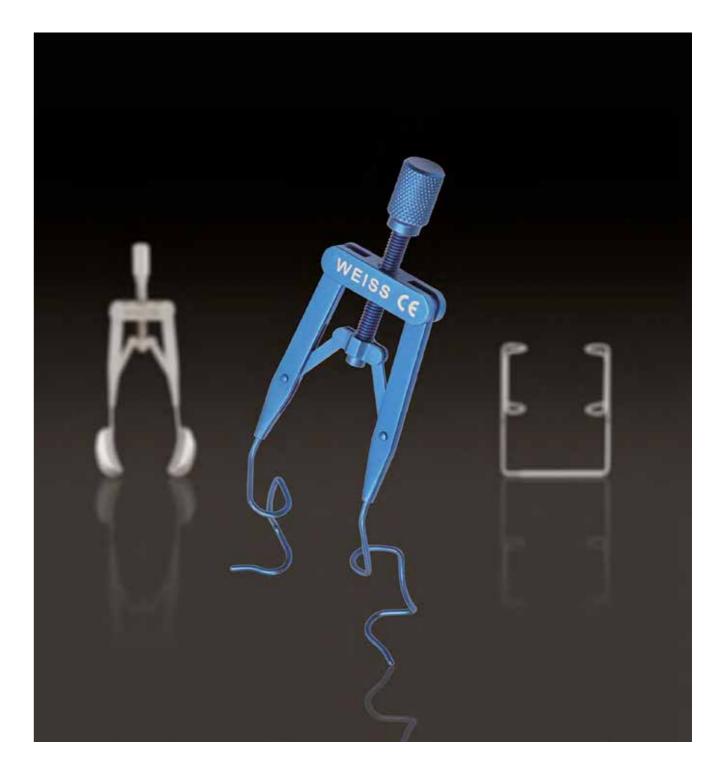
**K4-5075** blunted tips

### **MCPHERSON-VANNAS**

8mm long blades, sharp tips

**K4-5100** curved

## **SPECULUM**





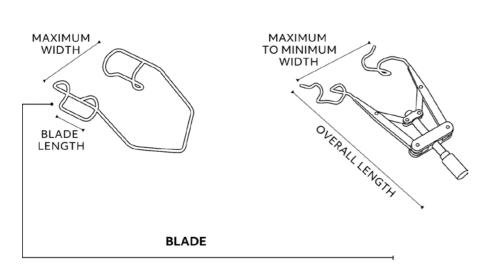
## **SPECULUM**



### **SPECULA ANATOMY**

### NON-ADJUSTABLE

### **ADJUSTABLE**





**Open:** allows good access for instruments e.g. Phaco handpiece that might otherwise rest on the top bar of a closed blade making surgery difficult



**Closed:** good hold on eyelids for procedures where the top bar does not cause a problem e.g trabeculectomy or temporal incision phaco



**Wire**:more comfortable for the patient under local anaesthetic, particularly when used with a sliding wire speculum or a non-adjustable speculum



Solid: holds eyelids securely

### LIEBERMAN STYLE, ASPIRATING

Adjustable mechanism

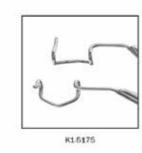
Features aspirating ports to remove excess fluid from the surgical field.

Supplied with silicone tubing and luer-lock adaptor.

K1-5171	Lieberman, Kratz style, 15mm blades
K1-5173	Thorlakson, rounded, 11mm blades
K1-5175	Lieberman, V-shaped, 15mm blades
K1-5180	Chu, solid, reversible, 15mm blades
K1-5179	replacement silicone tubing, 100cm (39")





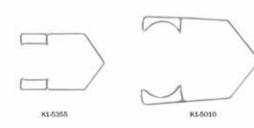




### **BARRAQUER**

Wire Speculum

K1-5000	standard wire, 10mm blades
K1-5008	extra heavy wire, 15mm blades
K1-5009	heavy wire, 15mm blades
K1-5010	standard wire, 15mm blades
K1-5355	infant size, 9mm blades

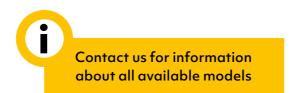








## **IOL FORCEPS**



IOL FORCEPS

katena HE JOHN WEISS INTERNATIONAL DUCKWOrth & R

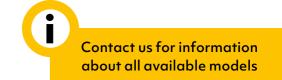
### ICL™

Loading Forceps 11mm long smoothly polished jaws





## **IOL CUTTERS**



### **DONNENFELD**

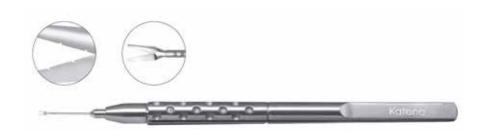
Micro IOL Cutter

4mm long blades

micro notches in blades for traction

For cutting soft IOLs through a 1.5mm incision.





### STOLTE

IOL Cutter

titanium

slotted cover to retain soft IOL during cuttingprocess

For cutting soft IOLs.

K4-5565







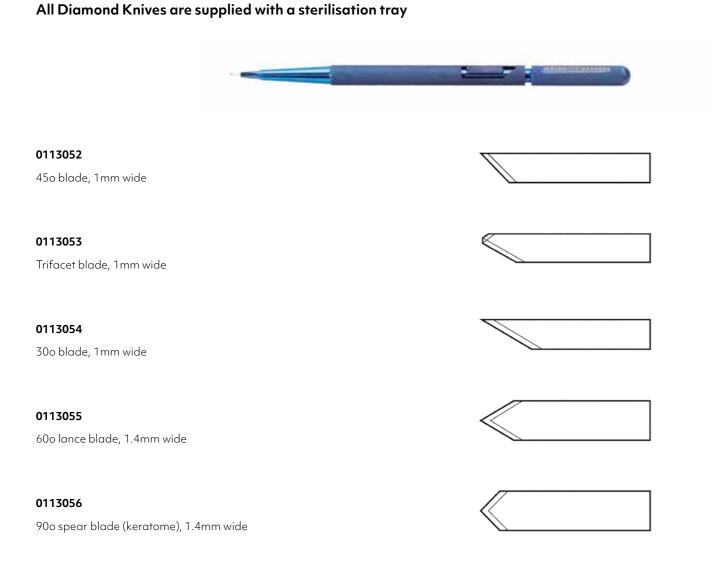


## DIAMOND KNIVES katena DIAMOND KNIVES katena DIAMOND KNIVES

## **DIAMOND KNIFES**



## OVERALL LENGTH 110MM (NOT INCLUDING BLADE)



## **FIXATION, GAUGES & MARKERS**









## Contact us for information about all available models

FIXATION, GAUGES & MARKERS

### FIXATION RING

### THORNTON FIXATION RING

3/4 ring, 13mm diameter ring with ten point fixation

Pivot swivel flat handle, overall length



### LASIK MARKER

### LASIK MARKER

Lowest profile with three radial elements and two non-radial elements

Round handle, overall length 98mm.

### 9-854R

### BLADE MARKER

### **AXIS MARKER, 2 BLADES**

2 axial blades

4mm inside diameter, 11.6mm outside diameter

Lowest profile with centre pointer

Round handle, overall length 95mm

### 9-729-1

## TORIC MARKER

### **CIONNI TORIC REFERENCE MARKER**

3 blades, radial marks

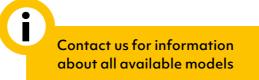
10mm inside diameter, 15mm outside diameter

70° angled shaft

Round handle, overall length 124mm

### 9-840













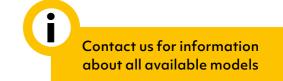






# **STERILISING TRAYS**

### **POLYMER - REMOVABLE LID**



### 0112014

Tray, 2 tier, holds 20 instruments with silicone finger matting.

Outer size W260mm D160mm H45mm.

Inner size W250mm D150mm H40mm.



### 0112016

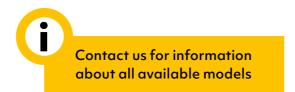
Tray holds 1 - 2 instruments with silicone finger matting.

Outer size W160mm D70mm H25mm.

Inner size W150mm D60mm H20mm.



## **BIPOLAR FORCEPS**



**BIPOLAR FORCEPS** 

katena

Delichen Weiss
International

Duckwirth A k

### **BIPOLAR FORCEPS**

McPherson type lightly blunted tips straight

K8-7020



### **BIPOLAR FORCEPS**

McPherson type lightly blunted tips angled

K8-7021



### **BIPOLAR**

Coaptation Forceps pointed tips

K8-7030



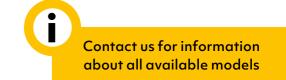
### **BIPOLAR CORD**

autoclavable

K8-7065



## **MISCELLANEOUS**



### **CASTROVIEJO DILATOR**

straight

double ended with 1x 18mm and 1x 22mm tapered tips,

overall length 138mm

### 0105040 SS

### **LIEBREICHS (BOWMANS) PROBES**

### 0105008

Available as a set of 4 or individually as below.

### 0105011

0000 & 000 double ended, overall length 126mm

### 0105012

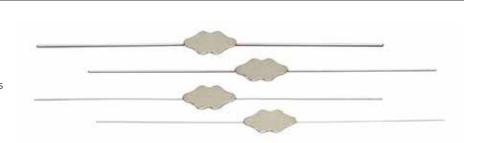
00 & 0 double ended, overall length 126mm

### 0105013

1 & 2 double ended, overall length 126mm

### 0105016

3 & 4 double ended, overall length 126mm





**REUSABLE INSTRUMENTS MISCELLANOUS** 

- Iris Retractor and Cataract Support System
- · Capsule Polisher
- Lens Loop and Expressor

### Corneal

- Lamellar Dissector
- Trephine Guide and Epithelial Disruptor
- Keratometer and Scleral Support Rings 1

### Glaucoma

- Punches
- Conjunctival Clamps

### Lacrimal

• Lacrimal Probes and Dilators

### MACKOOL CAPSULE POLISHER

### Oculoplastics

- Curettes
- Eye Shields
- Retractors
- Clamps

### Paediatric

Muscle Hooks

### Vitreoretinal

- Scleral Depressors
- Membrane Spatula
- Cannula Forceps

0.3mm diameter olive shaped textured tip 45° angled shaft, tip to angle length 11mm Round handle, overall length 119mm





### **KHAW DESCEMET'S** MEMBRANE PUNCH, MEDIUM

Designed to punch 0.75mm x 0.5mm

• Round squeeze handle, overall length 117mm

7-102







## I/A INSTRUMENTS

### SINGLE-USE SWISS BIMANUAL I/A SYSTEMS, STERILE

The curved irrigation and aspiration cannulas with elegant aeroplane-nose design have a diameter of just 0.8 mm (21G) and can be introduced effortlessly through the smallest paracentesis. At the same time, the inner lumens are designed with maximum size for efficient capsule cleaning with a stable anterior chamber.

The tip of the aspiration cannula is textured for capsule polishing. On the SBS105 the irrigation cannula is slightly pointed and open at the front. This ensures an active rinsing function.

Iconsisting of: Bimanual I/A Instrument (Box of 10)



IRRIGATION/ASPIRATION

**BURK** medicel

ITEM CODE	SIZE	INCISION SIZE	ASPIRATION CANNULA	ASPIRATION PORT	ASPIRATION HEAD	IRRIGATION CANNULA	IRRIGATION PORT
SBS105	21G / 0.8mm	1.1mm	curved, aeroplane shape	0.35mm	textured	open	1 port, 0.5mm
SBS110A	21G / 0.8mm	1.1mm	curved, aeroplane shape	0.35mm	textured	curved, aeroplane shape	2 ports, 0.45mm
SBS122A	22G / 0.7mm	1.0mm	aeroplane shape	0.35mm	textured	curved, aeroplane shape	2 ports, 0.45mm
SBS123A	23G / 0.65mm	0.8mm	aeroplane shape	0.30mm	textured	curved, aeroplane shape	2 ports, 0.35mm

### MULTI-USE BIMANUAL I/A SYSTEMS, STERILE (AUTOCLAVABLE UP TO 10 TIMES)

This unique semi-disposable line is fully autoclavable and validated for up to 10 sterilisations. Same as the single-use line, the multiple-use products are sterile packed.

Sets delivered sterile, components can be autoclaved at 121°C/20 min or 134°C/5 min up to 10 times.

Consisting of: Bimanual I/A Instrument (Box of 10)



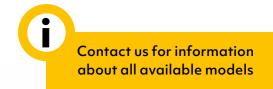
ITEM CODE	SIZE	INCISION SIZE	ASPIRATION CANNULA	ASPIRATION PORT	ASPIRATION HEAD	IRRIGATION CANNULA	IRRIGATION PORT
SBS105RU	21G / 0.8mm	1.1mm	curved, aeroplane shape	0.35mm	textured	open	1 port, 0.5mm
SBS110ARU	21G / 0.8mm	1.1mm	curved, aeroplane shape	0.35mm	textured	curved, aeroplane shape	2 ports, 0.45mm







## **CHOPPERS - MANIPULATORS - SPATULAS**



### 40-5002

### MANIPULATOR LENS HOOK SINSKEY STRAIGHT

Tip L 0.5mm O/L 124mm



### 41-2006

### **ROTATOR NUCLEUS Y SHAPED**

On vertical axis Tip Angled at 45 Degrees Tip L 10mm O/L 124mm



### 41-5001

### MANIPULATOR LENS HOOK SINSKEY ANGLED

Tip Angled at 45 Degrees Tip L 0.5mm O/L 120mm Tip L 0.5mm O/L 124mm



### 41-1006-

### LESTER IOL MANIPULATOR Tip Angled at 45 Degrees

Tip L 12mm 1mm Branch O/L 125mm



### 41-3004

### MANIPULATOR SPATULA

Tip Angled at 45 Degrees Tip L 12mm W0.75mm O/L 135mm



### 41-8009

### **MANIPULATOR MUSHROOM TIPPED**

Tip Angled at 45 Degrees Tip L 11mm O/L 123mm



### 41-3005

### **NEUHANN SPATULA**

Tip Angled at 45 Degrees Tip Curved Angled



### 41-4006

### **SPATULA GOVAN**

Tip Angled at 45 Degrees Tip L 10mm O/L 130mm



### 41-2005

### **ROTATOR NUCLEUS Y SHAPED**

On horizontal axis Tip Angled at 45 Degrees Tip L 10mm O/L 124mm



### 41-4003

### MANIPULATOR PHACO **CHOPPER MACKOOL**

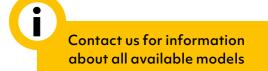
Tip Angled at 45 Degrees Tip L 2mm O/L 120mm





CHOPPERS-MANIPULATORS-SPATULAS

## **FORCEPS**



41-7008

### **CHOPPER GREENS PHACO**

Tip Angled at 45 Degrees Tip L 10mm O/L 117mm



41-4005

### **CHOPPER SADIQ**

Tip Angled at 45 Degrees Tip L 11mm O/L 121mm



41-7009

### **CHOPPER CLAW**

Tip Angled at 45 Degrees Tip L 10mm O/L 123mm



41-4004

### **CHOPPER AMBIDEXTROUS**

Tip Angled at 45 Degrees Tip L 11mm O/L 115mm



41-6007

### PADDLE MANIPULATOR DRYSDALE

Tip Angled at 45 Degrees Tip L 11 mm Spatula 1 mm O/L 120mm



41-4007

Tip Angled at 45 Degrees Tip L 11mm 0/L 115mm

**HAEFLIGER CHOPPER** 







41-9010

### MANIPULATOR SINSKEY/MUSHROOM DOUBLE ENDED

Tips Angled at 45 Degrees Sinskey Tip Length 0.65mm, Mushroom Tip O/L 123mm





## **NEEDLE HOLDERS**



NEEDLE HOLDERS

blinkmedical

### **MCPHERSON**

very delicate jaws

**K6-1000** straight jaws, with lock **K6-1010** straight jaws, without lock **K6-1020** curved jaws, with lock

**K6-1030** curved jaws, without lock



### **CASTROVIEJO**

very delicate jaws

**K6-1500** straight, with lock

**K6-1510** straight, without lock **K6-1520** curved, with lock

**K6-1530** curved, without lock



## **SCISSORS**



### 20-7001

### **SCISSORS IRIS STRAIGHT**

Rounded Tip 0/L 100mmm



### 20-6003

### **SCISSORS VANNAS STRAIGHT**

0/L 95mm





## **SPECULUM**



31-2003

### **SPECULUM BARRAQUER**

Angled Tempora! L40mm W30mm



30-2004

### SPECULUM BARRAQUER STRAIGHT

L40mmW30mm



31-1006

### SPECULUM KRATZ-BARRAQUER

Angled Tempora! L40mm W30mm







SMI AG was established in 1987 – the first Belgian company to manufacture surgical sutures – since when it has grown rapidly. Today it is recognized as an experienced and world-wide supplier of surgical sutures. The company is situated in St. Vith in the east of Belgium, near the point where the borders of Belgium,

Germany and Luxembourg meet

SMI complies with international quality standards such as EN ISO 13485 as well as Good Manufacturing Practices (GMP). Our products are manufactured with newest techniques and all compounds are of highes technical level. All raw materials and finished products are submitted to stringent quality control by a highly qualified team.

SMI is dedicated to customer satisfaction by ensuring high quality products and an excellent service based on customer focus, reliability and delivery performance.



SMI surgical needles are manufactured from highest quality stainless steel grades for outstanding performance, combining high ductility and strong bending moment.

Advanced silicon coating ensures smooth penetration and reduced tissue trauma. The shape of the needle body is designed in order to allow maximum stability in the needle holder.

### 5/8 CIRCLE 1/2 CIRCLE 3/8 CIRCLE 1/4 CIRCLE



J-NEEDLE







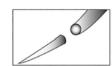






**SURGICRYL** 

M



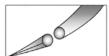






**TAPER POINT** 

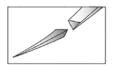
A gradual taper to a round bodied needle.





## TAPER CUTTING POINT

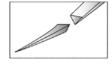
Balanced, cutting point-tapering into a round bodied needle.





### REVERSE CUTTING

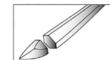
A triangular body offers a third cutting edge on the outer convex curvature.





### **EASY PASS NEEDLE**

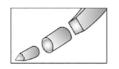
Precision point with extra sharpening.





### SIDE CUTTING SPATULA NEEDLES

Needle with cutting edges on the two sides.





### **SOFT CUTTING POINT - CORONARY**

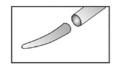
A minute point followed by a round body and a rectangular main body for better penetration in cardiovascular surgery.





### CONVENTIONAL CUTTING

A triangular body offers a third cutting edge on the inside concave curvature.





### **BLUNT NEEDLE**

Cylindrical bodied needle with a rounded point. For soft tissue such as in liver and kidneys. Reduced risk of needle stick injuries.

## **SURGICRYL**

### **POLYGLACTINE**



## **SURGICRYL**

### **POLYGLYCOLIC ACID**



### Surgicryl 910 Polyglactine 910 Approximately 30 days wound support

Туре	Braided and coated multifilament
Composition	Polyglactine 910, a copolymer made of 90% glycolide and 100/ollactide
Coating	Poly-glycolide-co-L-lactide and calcium stearate (<1 %)
Colour	Violet
Tissue reaction	Minimal
Absorption	The hydrolytic action by which the material is broken down results in total absorption between 56 and 70 days. Between 40% and 50% of tensile strength remain after 21 days.
Presentation	Box with 12 sutures

### Surgicryl PGA Polyglycolic acid Approximately 30 days wound support

Туре	Braided and coated multifilament
Composition	Polyglycolic acid
Coating	Polycaprolactone and calcium stearate (1 %)
Colour	Violet/ Beige - undyed
Tissue reaction	Minimal
Absorption	The hydrolytic action by which the material is broken down results in total absorption in approximately 60 to 90 days. Approximately 50% of tensile strength remain after 21 days.
Presentation	Box with 12 sutures







## **SILK**



Туре	Braided multifilament
Composition	Braided fibres from the cocoon of the silkworm
Coating	Silicone
Colour	Black
Tissue reaction	Moderate
Absorption	Silk suture elicits an initial inflammatory reaction in tissues, which is followed by gradual encapsulation of the suture by fibrous connective tissues.
Presentation	Box with 12 sutures

## **NYLON**



Туре	Monofilament
Composition	Extrusion of polyamide 6.0 or 6.6
Coating	None
Colour	Blue Black
Tissue reaction	Minimal
Absorption	Non absorbable, gradually encapsulated by connective tissue. The thread mass diminishes, approximately 10% a year by rupture of chemica! links (hydrolytic action).
Presentation	Box with 12 sutures

## **POLYPROPYLENE**



Туре	Monofilament
Composition	Polypropylene, a polymer of propylene
Coating	None
Colour	Blue
Tissue reaction	Minimal
Absorption	Non absorbable
Presentation	Box with 12 sutures

## **POLYESTER**



Туре	Braided multifilament
Composition	Polyester - a polymer of polyethylene terephthalate
Coating	Silicone
Colour	Green White
Tissue reaction	Minimal
Absorption	Non absorbable, gradually encapsulated by connective tissue
Presentation	Box with 12 sutures

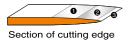




## **STAB KNIVES**

- Cataract Surgery / Scleral Tunnel Incision Pregroove, Side port
- Cataract Surgery / Clear Corneal Incision Side port

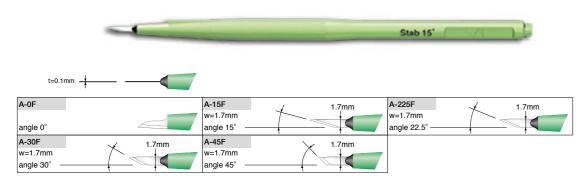
Precisely ground in 3 bevels for ultra sharp incision and piercing.



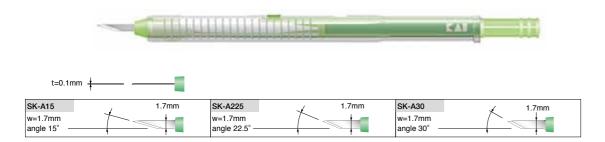
**Distinction of Kai's Stab Knife** Stab Knife blade is made of razor blade with 3 bevel edge-setting.
The razor edge-setting method ensures the consistent sharpness and precision of Stab Knife.

STAB KNIVES

### **REGULAR TYPE**



### SAFETY TYPE



## **CRESCENT KNIVES**

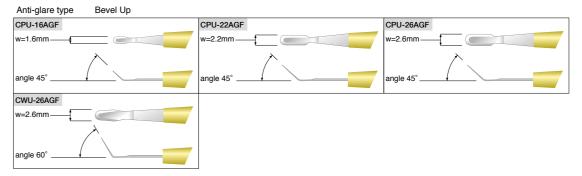
• Cataract Surgery / Scleral Tunnel Incision - Scleral Tunnel

Either straight or tapered sides are available to create the optimal tunnel or flap.

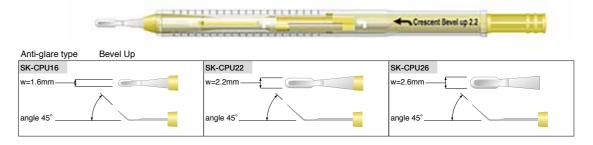


### **REGULAR TYPE**





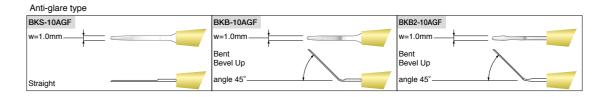
### SAFETY TYPE



## **BLEB KNIVES**

- Glaucoma
- Trabeculectomy
- Needling

### **REGULAR TYPE**





## SLIT KNIVES

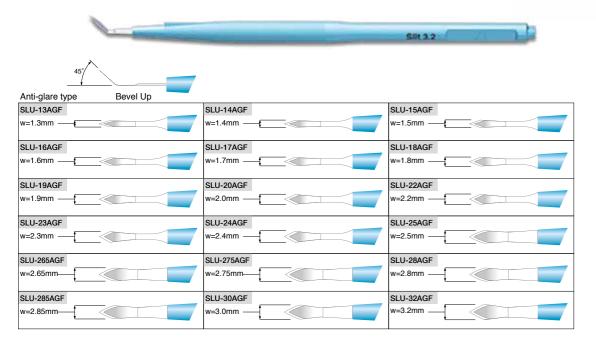
## **SLIT KNIVES**

• Cataract Surgery / Scleral Tunnel Incision - Scleral Tunnel

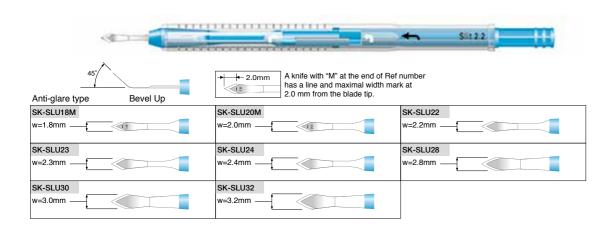
Many sizes are available to ensure the exact incision for your choice of phaco tip and operating access. Precision created by computer driven grinding technology.



### **REGULAR TYPE**



### SAFETY TYPE

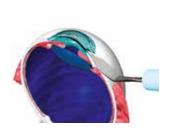


## **CLEAR CORNEAL KNIVES**

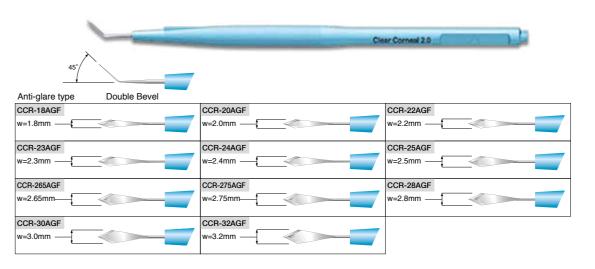
• Cataract Surgery / Clear Corneal Incision - Whole Incision

The latest technology, chemical etching process creates this ultra sharp blade, producing a double bevel perfectly suited to clear corneal incisions.

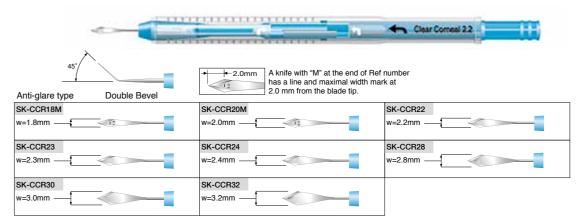
The new geometry allows high manoeuvrability for crafting the phaco self-sealing corneal tunnel.



### **REGULAR TYPE**



### SAFETY TYPE







## **TRAPEZOID KNIVES**

• Cataract Surgery / Clear Corneal Incision - Whole Incision

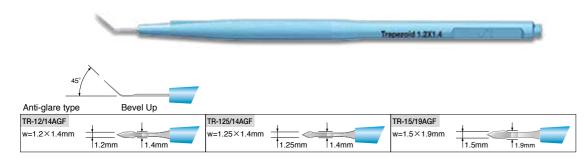
The Trapezoidal shape creates a tunnel with graduated sides, non parallel, to provide more manoeuvrability for the phaco tip.





TRAPEZOID KNIVES

### **REGULAR TYPE**

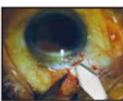


## **IMPLANT KNIVES**

• Cataract Surgery / Scleral Tunnel Incision - Incision Widenning for IOL

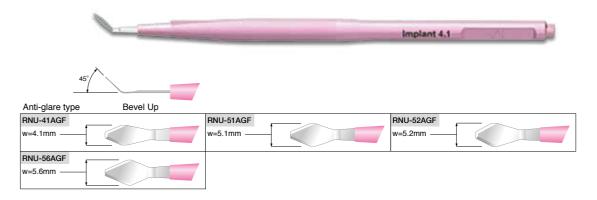
Manufactured to extend the phaco tip incision to create the exact size required to implant your intra ocular lens of choice.







### **REGULAR TYPE**





## MVR KNIVES

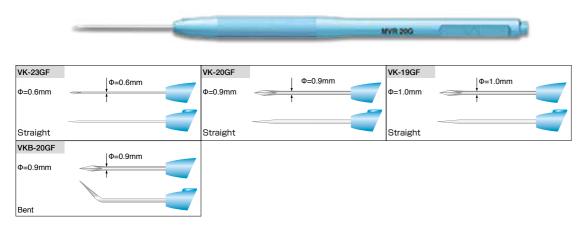
## **MVR KNIVES**

- Cataract Surgery / Scleral Tunnel Incision Side port
- Cataract Surgery / Clear Corneal Incision Side port
- Cataract Surgery / Retina Surgery Scleral Incision

Specifically designed for very precise vitrectomy surgery. Available in both straight and angled styles.



### **REGULAR TYPE**



### SAFETY TYPE



## **PARACENTESIS KNIVES**

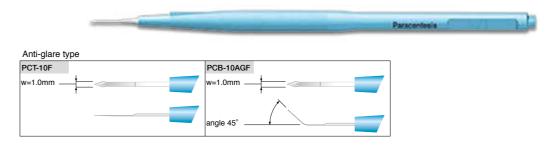
- Cataract Surgery / Scleral Tunnel Incision Side port
- Cataract Surgery / Clear Corneal Incision Side port



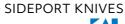




### **REGULAR TYPE**









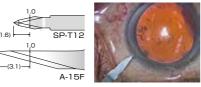
## **SIDEPORT KNIVES**

- Cataract Surgery / Scleral Tunnel Incision Side port
- Cataract Surgery / Clear Corneal Incision Side port

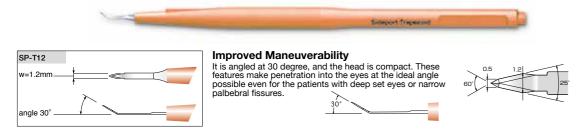
### **REGULAR TYPE**

### SIDEPORT KNIFE TRAPEZOID

### Suitable for Eyes with Shallow Anterior Chambers



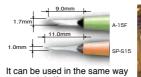
Compared to the 15 degree or 22.5 degree stab knives, Sideport Knife Trapezoid can create trapezoidal incision with short incision distance. It minimizes the risk of damaging nucleus and especially effective to the patients with shallow anterior chambers. Also, the incision size can be adjusted by the depth of penetration, and it is easy to enlarge the incision with the sufficient length of the blades on both sides.

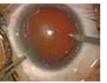


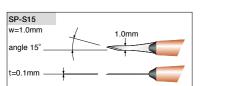
### **REGULAR TYPE**

### SIDEPORT KNIFE STRAIGHT

A 1 mm-width sideport can be stably prepared. The 15°-angle-blade allows easy expansion of incision.







### REGULAR TYPE

### SIDEPORT KNIFE UTILITY

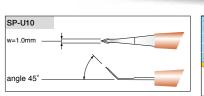
Able to make a stable sideport.

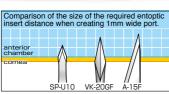
Can easily create a port when using a retracter.

Able to incise lamellar sclera with a single sideport knife utility











# 06 DISPOSABLE CANNULAS



HYDRODISSECTION CANNULAS

M3919

### **HYDRODISSECTION CANNULAS**

0.4 x 22mm

Hydrodissector.

Angled 2mm tapered tip (Akahoshi)



M2274

### **HYDRODISSECTION CANNULAS**

0.5 x 22mm

Hydrodissector.

Curved.

Tip flattened in vertical plane (Kellan)

### M3904

### **HYDRODISSECTION CANNULAS**

0.4 x 19mm

Hydrodissector.

Tip angled 90 degrees and flattened in the vertical plane (Chang)





# OPHTALMIC CANNULAS

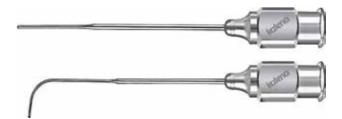


**K7-3000** straight **K7-3010** curved

### **LACRIMAL CANNULA**

malleable tip

23 gauge



**K7-4308** curved right **K7-4309** curved left

### SIMCOE

Irrigating–Aspirating Cannula U-shaped, with 0.3mm anterior aspiration port, 23 gauge

Supplied with silicone tubing and adaptor.

For aspiration through tubing hub and irrigation through luer-lock hub.



### K7-4302

### **REVERSED SIMCOE**

Irrigating-Aspirating Cannula 15mm long

0.3mm diameter aspiration port front opening irrigation port

23 gauge thin wall

For aspiration through luer-lock hub and irrigation through tubing hub.





# RYCROFT ANTERIOR CHAMBER CANNULAS



RYCROFT ANTERIOR CHAMBER CANNULAS

### M2658

### **ANTERIOR CHAMBER MAINTAINERS**

Self-retaining cannulas designed for the continual infusion of fluid to maintain the AC during cataract surgery or anterior vitrectomy.

0.64 x 3.5mm

Anterior Chamber Maintainer.

150mm silicone tubing.

Annular Rings allow cannula to be self retaining (Lewicky)



### M2639

### **ANTERIOR CHAMBER MAINTENANCE CANNULAS**

For maintaining and forming the anterior chamber during surgery by injecting or removing viscoelastic materials, BSS or air.

0.5 x 25mm

Anterior Chamber Cannula.

Angled 35°, 7.5mm from tip (Rycroft)



### M2280

### TRANSZONULAR INJECTION CANNULA

For the intraoperative injection of steroid-antibiotic combinations.

0.4 x 22mm

Transzonular Injection Cannula.

Angled 33°, 2mm from tip.



# VISCOELASTIC CANNULAS



### M3926A

### **VISCOELASTIC CANNULAS**

0.4 x 22mm

Viscoelastic Cannula.

Angled at 35°, 9mm from tip



### M3910

### **VISCOELASTIC CANNULAS**

0.81 x 22mm

Viscoelastic Cannula.

Straight



### M3917

### **VISCOELASTIC CANNULAS**

0.4 x229mm

Viscoelastic Cannula.

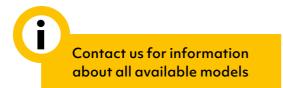
Angled and formed 11mm from tip





DISPOSABLE CANNULAS OTHERS

## **OTHERS**



### M3630

### **FORMED IRRIGATING CYSTOTOMES**

00.3 x 16mm

Cystotome.

Formed



### **FORMED IRRIGATING CYSTOTOMES**

0.4 x 22mm

Long Cystotome.

Formed.



### M8604A

### **CAPSULE POLISHING CANNULAS**

0.64 x 22mm

Capsule Polisher.

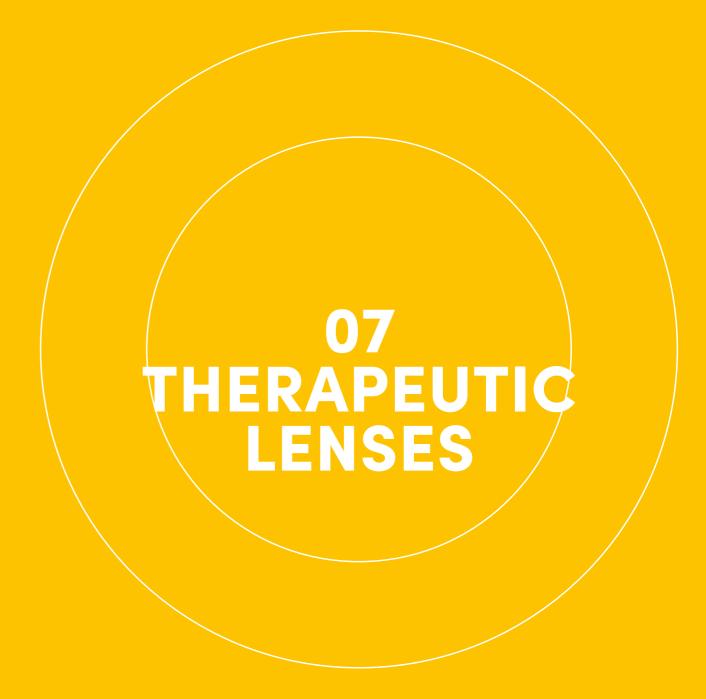
Angled 9mm from tip.

Aspiration through 0.3mm side port.

Micro-etched tip







## **MEGASOFT**



**MEGASOFT** 

- First choice in almost every indication for therapeutic lenses
- · Ideal in cases where standard therapeutic lenses come off easily
- First choice lens in case of trabeculectomy

The Megasoft lens is a soft therapeutic contactlens. The lens protects a large part of the anterior eye against effects from outside. The Megasoft therapeutic lens is used, among other things, to repair or preserve the integrity of the ocular tissue.

Megasoft is especially recommended by means of protection after a glaucoma operation. After this operation, the scleral flap is sutured loosely enough to allow aqueous drainage at the edges of the flap to reduce the pressure in the eye. The eye can then be protected during healing with the Megasoft lens. The Megasoft is also used in cases of symblepharon, or concrescence of the conjunctiva of the eyelids with the eyeball.

### **TECHNICAL DETAILS**

Radius (r0)	10,00 mm		
Power (F`v)	standaard plano		
Diameter (øT)	20,50 mm Special parameters on demand		
Material	Xylofilcon B		
Water content	76% ±2%		
Central thickness	0,55 mm bij 0 D		
Dk:	46:		

## **REGENERA**



- Complete corneo-scleral coverage
- · Oxygen permeability and hydration
- · Medicinal and re-epithelializing activity within 2 days
- Reduction of lipd deposits

First therapeutic lens designed to combine the beneficial characteristics of its component material with the soothing properties of Aloe vera -ALvera, which conger antimicrobial anti-inflammatory and re-epithelializing activity.

Alvera is designed to act against lipid deposits. Not only does it remove them effectively, but it also reduces the affinity of lipids

to adhere to the surface of the contact mens, which significantly increases hygiene and comfort.

Regenera lenses are made of Filcon II 3, a material authorized for therapeutic use and characterized by excellent hydration and

### **TECHNICAL DETAILS**

high permeability to oxygen.

Material	Filcon II 3 (Hydrogel)
Water content	75%
Geometry	inverse
Base curvature	8.6
Diameter	16,5 mm
Central thickness	120 micron
Focal power	0,00 D
Visibility coloring	transparent
Therapeutic use	Continuous up to 7 days

### MATERIAL CHARACTERISTICS

Oxygen permeability (ISO) @35°C (barrers)	43
Swell factor @ 20°C	1,61
Watercontent by refractometer@20°C	74,5%
Refractive index @20°C dry	1.525
Refractive index @20°C hydrated	1.375
Light transmission (%) @380-780nm	>95%





THERAPEUTIC LENSES OTHER BRANDS

PureVision and PureVision2 contact lenses are indicated for therapeutic use. When placed on the cornea for therapeutic use, these lenses act as a bandage to protect the cornea and relieve pain during treatment of ocular pathologies as well as post-surgical conditions.

Applications include, but are not limited to, conditions such as the following:

- For corneal protection in conditions such as entropion, trichiasis, tarsal scars, recurrent corneal erosion and post surgical ptosis for corneal protection;
- For corneal pain relief in conditions such as bullous keratopathy, epithelial erosion and abrasion, filamentary keratitis, post-keratoplasty;
- For use as a bandage during the healing process of conditions such as chronic epithelial defects, corneal ulcer, neurotrophic keratitis, neuroparalytic keratitis, chemical burns, and post surgical epithelial defects.
- For post-surgical conditions that include bandage use such as LASIK, PRK, PK, PTK, lamellar grafts, corneal flaps, and additional corneal surgical conditions.





## **PROCEDURE PACKS**



## The personal solution for your eye surgery: Benefit from the advantages of individual surgical custom procedure packs.

We only work with highly professional suppliers where packs are designed and assembled within a certified clean-room environment. Packs are designed to match exact procedural needs across all types of surgery: IV-Injections, Blepharo, Cataract, Vitreoretinal, ICL, Lasik, ...

Surgical teams can be confident that all necessary components for a procedure will be supplied in a pre-sterile pack, ready for use.

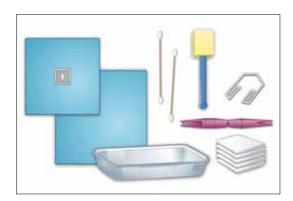
Continuously work with the advantages for the customer:

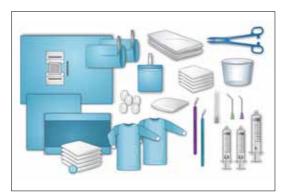
- cost savings
- configuration per user possible
- comfort by timesaving processing
- minimum set-up times
- optimal workflow

Simultaneously, the time-consuming shopping from various suppliers is not applicable. Have all the needed items from different suppliers in 1 pack .

The storage is enormously simplified and space saving. The volume of waste is reduced.

Benefit of the full potential of individual solutions, we help you to set up the correct conficguration.











## **TENSION RINGS**

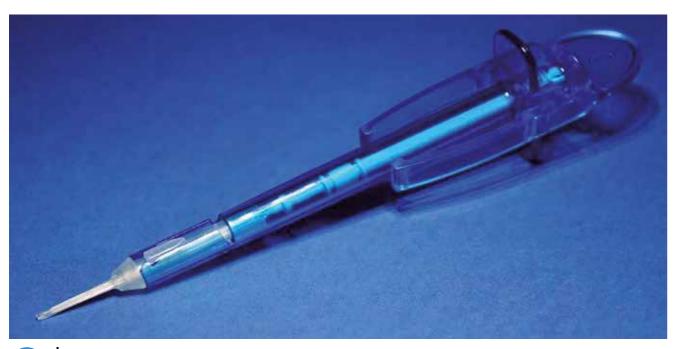
## An elegant & sophisticated single-use, preloaded Capsular Tension Ring Injector. An essential instrument to simplify the procedure...

On-going surveillance of the ophthalmic market enables "O&Omdc" to develop and design highly efficient delivery systems, in line with market trends, that meet and exceed customer expectations. By using a combination of advanced Medical Grade

Polymers and sophisticated, high-tech injection moulding techniques, we are able to offer innovative and high-quality single-use Injectors to our customers. The Inside CTR Delivery System is intuitive and user friendly and delivers uncompromising quality, efficiency, consistency and patient safety.



	TYPE 15	TYPE 15A	TYPE 15B
Size (Compressed)	10.0 mm	11.0 mm	12.0 mm
Size (open)	12.3 mm	13.0 mm	14.5 mm
Zonular Damage	Up to 4 hours (120°)		
Incision	2.2 mm		
Material	CLEAR PMMA (Compress Moulded)		
Direction of Implantation	RIGHT (Clockwise)		
Feature	One bent eyelet, which reduces a possible puncturing (bulging) of the capsular bag when being dialled into the bag		



## **TENSION RINGS**

## Preloaded Capsular Tension Ring in a single use injector

- Selfloading
- Onehand-Technique
- Implantation clockwise or counter clockwise
- Patented Hockey design of CTR
- Implantation with 2.0 mm incision



PRE-TENSION® 13/11			
Compression	From 13 mm to 11 mm		
Material	Clear PMMA, flexible ring		
Preloaded	Self-loading, single packaging a valuable addition to your surgical armamentarium		
Injector	<ul> <li>Easy to use</li> <li>Total control (includes action/reaction mechanism)</li> <li>Implantation clockwise or counter clockwise (indicators on injector)</li> <li>Long small tip (especially convenient in cases of deep set eyes)</li> <li>Beveled tip (for easy entry into the incision)</li> </ul>		
Capsular Tension Ring	Circular expansion and stabilization of the capsular bag Safe IOL centration in eyes with zonular dehiscence Prevents IOL decentration after capsular shrinking Stabilized conditions during Phaco-emulsification surgery Reduced risk of capsular fibrosis Improves visual acuity when implanted along with premium IOL		



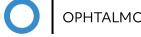
Push the pushrod forward until it is limited.



Slowly put the Capsular Tension Ring into the tip of Injector.

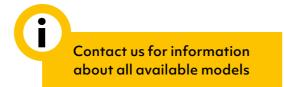


The Capsular Tension Ring is completely put into the tip of Injector.





## **CAUTERY**



### 8440000

## VARIABLE TEMPERATURE CAUTERY DIAL CONTROLLED

454°-649°C (849°-1200°F), 1/2" shaft with fine tip, 10/bx



### 8441000

### **LOW TEMPERATURE CAUTERY**

677°C (1200°F), 1/2" shaft with fine tip, 10/Bx



### 8442000

### **HIGH TEMPERATURE CAUTERY**

1205°C (2200°F), 1/2" shaft with fine tip, 10/bx







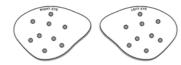
## **EYESHIELDS**



### **EYE SHIELD (LEFT/RIGHT)**

White lightweight plastic eye shield with ventilation holes. Flexible eye shield, shaped to fit the right or left eye for protection and comfort. Smooth edges do not require a cover. Packaged sterile. 25 left/25 right per box.





### **UNIVERSAL EYE SHIELD**

Clear lightweight plastic. Features smooth edges and ventilation holes for patient comfort. For use on left or right eye. Packaged sterile. 50 per box.

**581040** 7.5 cm x 6.5 cm (3 in x 2 1/2 in)



### UNIVERSAL PAEDIATRIC EYE SHIELD

Clear lightweight plastic. Features smooth edges and ventilation holes for patient comfort. For use on left or right eye. Packaged sterile. 25 per box.

**581708** 5.1 cm x 4.1 cm (2 in x 1 5/8 in)



### **EYE SHIELDS**

Plastic eye shields with ventilation holes. Shaped to fit either the right or left eye for protection and comfort.  $7.5 \, \text{cm} \times 5.7 \, \text{cm}$  ( $2.94 \, \text{in} \times 2.25 \, \text{in}$ ). Packaged non-sterile. 12 per box..

0008600Eye Shield, right, white0008601Eye Shield, left, white0008604Eye Shield, right, beige0008605Eye Shield, left, beige0008606Eye Shield, right, green0008607Eye Shield, left, green0008608Eye Shield, right, blue0008609Eye Shield, left, blue0008610Universal Eye Shield, white0008612Universal Eye Shield, clear



## **SPEARS**



### **WECK-CEL CELLULOSE EYE SPEAR**

The standard in eye surgical fluid control. Made from highly absorbent. natural, cellulose material. Designed for use in delicate, surgical areas. Designed to maintain rigidity during wicking process. Light blue handle.

**0008680** 144 count, 6 per pouch. 24 pouches per box 180 count, 10 per pouch, 18 pouches per box



### **MEROCEL PVA EYE SPEAR**

Made from exclusive Merocel Polyvinyl Acetal (PVA) material. The Merocel material is highly absorbent, fast wicking and lint free. Designed to provide the surgeon with superior fibre free products for unparalleled fluid control. Blue handle. 7.16 cm (2.82 in) overall length.

**400101** 180 count, 10 per pouch, 18 pouches per box





## **IRIS RETRACTOR**

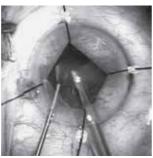


### IRIS RETRACTOR

- Flexible
- Sterile
- Disposable

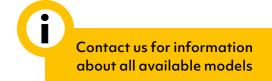
K20-3890 K20-3892 set of 5 5 sets of 5





IRIS RETRACTOR HOOKS

## **PUNCTUM PLUGS**



### **EAGLEPLUG®**

The original Tapered-Shaft™punctum plug.

• Designed to stay snugly in the punctal opening

Supplied: 2 individually packaged sterile plugs with inserter/dilator per twin pack.

30342	0.4mm dia.
30352	0.5mm dia.
30362	0.6mm dia.
30372	0.7mm dia.
30382	0.8mm dia.



### PLUG1™

The One-Size Solution for Dry Eye.

- One size
- Easy insertion
- Fits 0.5mm 0.8mm puncta
- Easily reversible

Supplied: 2 individually packaged sterile plugs with inserter/dilator per twin pack.

**30012** 0.5mm - 0.8mm diameter





## **SPONGES & WIPES**





### **WECK-CEL® SPONGE POINTS AND STRIPS**

Made from highly absorbent, natural, cellulose material.

**0008660** Points and Strips. 144 count, 2 points and 6 strips per pouch, 24 pouches per box

**0008661** Points. 240 count, 20 per pouch, 12 pouches per box



### **MEROCEL® SPONGE POINTS**

Made from exclusive Merocel Polyvinyl Acetal (PVA) material. The Merocel material is highly absorbent, fastwicking and lint free.

**400115** 400 count, 20 per pouch, 20 pouches per box **410115** 200 count, 10 per pouch, 20 pouches per box



### MEROCEL® CORNEAL LIGHT SHIELD

MUsed to protect hinge and posterior side of flap. Used to protect the retina from operating microscope light. Made from exclusive Merocel PVA material. The Merocel material is lint free. Designed to provide the surgeon with a superior fibre free product. 20 per box.

400106 Corneal Light Shield, 8 mm (.3 in) diameter



### KERACEL® LASIK CORNEAL SHIELD

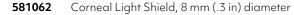
Round shield cut flat at one end to fit against the hinge of a LASIK corneal flap. Made from a patented high-density formulation of lint free Merocel Polyvinyl Acetal (PVA) sponge. Designed to provide the surgeon with a superior fibre free product. 10 mm diameter with straight edge. 20 per box.



400121 Corneal Light Shield with straight edge

### **VISITEC® CORNEAL LIGHT SHIELD**

PVA absorbent pad. Soft, porous structure protects the retina from operating microscope light. Contains no cellulose and does not leave lint or debris. Upon moistening, shield becomes soft and conforms to shape of cornea. Keeps cornea moist. Easy to remove. 20 per box.





### **ULTRACELL® CORNEAL LIGHT SHIELD**

Used to protect hinge and posterior side of corneal flap. Used to protect the retina from the operating microscope light. Made from PVA material. 20 per box..



**40420** Corneal Light Shield, 7 mm (.28 in)

## OPHTALMO

### **MEROCEL® INSTRUMENT WIPES**

Merocel wipes are designed to provide the surgeon with superior fibre free products for unparalleled fluid control and safe cleaning of fine microsurgical instruments. The exclusive Merocel® material is highly absorbent, fast wicking, lint free, Polyvinyl Acetal (PVA). 20 per box..

 223620
 Instrument Wipe
 76.2 x 76.2 mm (3 x 3 in)

 400200
 Instrument Wipe
 92.1 x 76.2 mm (3.625 x 3 in)

 400207
 Instrument Wipe
 76.2 x 76.2 mm (3 x 3 in)

 223621
 Wipe with Wick
 76.2 x 76.2 mm (3 x 3 in)

 400210
 Wipe with Wick
 92.1 x 76.2 mm (3.625 x 3 in)

 400204
 Wipe with Adhesive Back
 50.8 x 50.8 mm (2 x 2 in)



### VISITEC® VISIWIPE INSTRUMENT WIPES

20 per box.

**581047** Instrument Wipe 7.3 x 7.3 cm (2 7/8 x 2 7/8 in) **581076** Adhesive Wipe 7.6 x 4.5 cm (3 x 1 3/4 in)



### **ULTRACELL® INSTRUMENT WIPES**

20 per box

**90910** Instrument Wipe 76.2 x 76.2 mm (3 x 3 in), 1 mm thickx



### MEROCEL® DIAMOND CLEANING BLOCK

4.5 cm block. Made of highly absorbent, lint-free PVA material Single-use, sterile. 1 per box..

90910 Merocel® Diamond Cleaning Block

### MEROCEL® HARDTEN COLLECTOR

Adhesive-backed 2 in x 2 in sponge. May be attached to skin surface temporarily for fluid absorption. Sponge will hold up to 20 cc. Single-use, packaged sterile. 20 per box..





## **VACUUM TREPHINES**



**VACUUM TREPHINES** 

katena

### **BARRON RADIAL VACUUM TREPHINE** FOR THE RECIPIENT CORNEA

Sterile

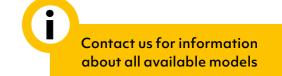
Disposable

**K20-2050** 6.0mm **K20-2052** 6.5mm **K20-2054** 7.0mm **K20-2055** 7.25mm **K20-2056** 7.5mm **K20-2057** 7.75mm **K20-2058** 8.0mm **K20-2059** 8.25mm **K20-2060** 8.5mm **K20-2061** 8.75mm **K20-2062** 9.0mm





## **VACUUM PUNCHES**



### **BARRON VACUUM PUNCH** FOR THE DONOR CORNEA

Disposable

**K20-2100** 6.0mm **K20-2102** 6.5mm **K20-2103** 6.75mm **K20-2104** 7.0mm **K20-2105** 7.25mm **K20-2106** 7.5mm **K20-2107** 7.75mm **K20-2108** 8.0mm **K20-2109** 8.25mm **K20-2110** 8.5mm **K20-2111** 8.75mm **K20-2112** 9.0mm **K20-2113** 9.25mm **K20-2114** 9.5mm





AEON™ PROTECT has been formulated to provide relief for mild to moderate dry eye.

AEON™ PROTECT is phosphate free.

#### **BENEFITS:**

- Sodium hyaluronate 0.3% with PEG 400 which provides long lasting lubrication and relief from dry eyes.
- Second generation preservative that keeps the eye drops sterile in the bottle, but once in contact with the eye dissipates into components naturally found in tears (Na+, Cl-, O2 and H2O).

Product	AEON™ PROTECT
Ingredients	0.3 % HA
Phosphate free	Yes
Preservative free	On contact with eye
Expiry date after opening	90 days
Storage	5 °C to 35 °C
Shelf life	30 months

## AEON™ PROTECT PLUS

**DRY EYES** 

Rayner



Designed to improve patient outcomes before and after eye surgery, AEON™ PROTECT PLUS is stored in an innovative dropper device which enables the solution to stay sterile, without the need of a preservative. AEON™ PROTECT PLUS is also phosphate free.

AEON™ PROTECT PLUS has a unique formulation, enhanced to provide an artificial tear for relief of moderate to severe dry eye.

#### BENEFITS:

- Cross-linked sodium hyaluronate 0.3% which retains more water and has higher viscoelasticity than linear sodium hyaluronate to enable relief of moderate to severe dry eye.
- Provides longer lasting lubrication of the eyes.

Product	AEON™ PROTECT PLUS
Ingredients	0.3 % Cross linked HA
Phosphate free	Yes
Preservative free	Yes
Expiry date after opening	60 days
Storage	5 °C to 35 °C
Shelf life	24 months

### AEON™ REPAIR



AEON™ REPAIR has been designed with the ophthalmologist in mind. Stored in an innovative dropper device which enables the solution to stay sterile, without the need of a preservative.

AEON™ REPAIR is also phosphate free. The active ingredients are tailored to help improve patient outcomes following eye surgery.

#### **BENEFITS:**

- Sodium hyaluronate 0.15% which lubricates and provides relief from dry eyes.
- Enhanced with vitamins A and E.
- B-glucan which helps to moisturise the eye.

## AEON™ NATRIUM CHLORIDE



AEON™ SODIUM CHORIDE 5% is a phosphate and preservative free hypertonic ophthalmic solution used for the temporary alleviation from symptoms associated with corneal oedema.

#### **BENEFITS:**

• One of the first to market that also contains both sodium hyaluronate and PEG 400 that create a soothing and lubricating eye drop.

Product	AEON™ PROTECT PLUS
Ingredients	0.15 % HA with vitamins A and E
Phosphate free	Yes
Preservative free	Yes
Expiry date after opening	90 days
Storage	5 °C to 35 °C
Shelf life	24 months

AEON™ NaCl
5 % Sodium Chloride, 0.3 % Sodium Hyaluronate, PEG 400, electrolytes
Yes
Yes
90 days
5 °C to 35 °C
24 months







ERC

FLUORESCEIN 1 MG STRIPS

### **I-DEW FLO**



- UK manufacturer & CE Certified
- 100 sterile strips individually wrapped in transparent pouches
- Produced using the Highest Grade Fluorescein and Premium Paper
- Optimum Spread/Concentration of the Fluorescein to ensure maximum performance in terms of ocular staining and surface retention time
- Fully automated production with "NO HUMAN TOUCH"

SCHIRMER TEST STRIPS

### **I-DEW TEARSTRIPS**



- UK manufacturer & CE Certified
- 100 sterile strips individually wrapped in transparent pouches
- Produced using the Highest Grade Premium Paper
- Fully automated production with "NO HUMAN TOUCH"
- Precision Graduation Technology
- Manufactured to US FDA cGMP standards

LISSAMINE GREEN STRIPS

### **I-DEW GREEN**



- UK manufacturer & CE Certified
- 100 sterile strips individually wrapped in Transparent Pouches
- Produced using the Highest Grade Lissamine Green and Premium Paper
- Optimum Spread/Concentration of the Lissamine to ensure maximum performance in terms of ocular staining and surface retention time
- Fully automated production with" NO HU MAN TOUCH"
- Manufactured to US FDA cGMP standards

ROSE BENGAL STRIPS

### **I-DEW ROSE**



- UK manufacturer & CE Certified
- 100 sterile strips individually wrapped in Transparent
  Payshor
- Produced using the Highest Grade Rose Bengal and Premium Paper
- Optimum Spread/Concentration of the Rose Bengal to ensure maximum performance in terms of ocular staining and surface retention time
- Fully automated production with "NO HUMAN TOUCH"
- Manufactured to US FDA cGMP standards







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<u>M620</u>



# Contact us for information about technical details



#### **OPTICS LEICA M620**

Magnification changer	6:1 zoom, motorized, adjustable speed	
Focusing	Motorized, 50 mm, adjustable speed, with automatic reset	
Oli vi	APO Leica WD = 175 mm, 200 mm	
Objective	Achromatic Leica f = 175 mm, 200 mm and 225 mm	
Eyepieces	Widefield eyepieces for those wearing glasses 8.33×, 10× and 12.5×; Diopter adjustment +/ with adjustable eyecup	
	Homogenous, coaxial illumination;	
Illumination	Integrated Red Reflex illumination, light intensity adjustable via control unit and/or footswitch jalousie for continuous, situation-dependent reduction of ambient illumination via sterile controls;	
	Quick-change lamp mount with 2 halogen lamps, 12V/50W filter changer with UV projective filter; 2 free openings for selectable filters diameter 32 mm	
Incliningmechanism +/- 5° manual fine adjustment, sterile operation		
	Positioning range 50 mm in X and Y direction;	
XY-unit	Adjustable speed, reset button, automatic reset at power on	
Control unit	Multifunctional display for brightness, magnification, reset and user selection, adjusting the speed of drives, individual user programming, Auto Reset	
	12-function footswitch with controls arranged longitudinally or transversally, wired or wireless	
Hand/Footswitch	Optional: 6- and 16-function wired footswitch, 12- and 16-function wireless footswitch, 12-function handswitch	



#### FLOOR STAND LEICA F20

F20 Compact floorstand
Compact base with 4 movable rollers, 4 foot brakes
608 × 608 mm
6.5 kg accessories on the microscope
1444 mm
1902 mm
210 kg (minimum equipment)

#### **ELECTRICAL DATA**

Supply	100–240 VAC (+/– 10%), 50/60 Hz / 250 VA
Protection class	Class 1
Safety type	Туре В





# <u>M822</u>







#### ELECTRICAL DATA

Power supply	100-240 V, 50/60 Hz, 400 VA
Power supply F40 / C40 / CT40	100–240 V, 50/60 Hz, 300 VA
Safety class / Type	Class 1

#### **ELECTRICAL DATA**

Magnification changer	APO-Zoom 6:1, motorized, with 2 separate beam paths
Magnification	3.5× – 21× (WD 175 mm, 10× eyepieces)
Optisc	APO-chromatic corrected optics
Field diameter	7 mm – 80 mm
Working distance	175 mm, 200 mm and 225 mm
Focus range	54 mm, motorized, with automatic reset
Eyepieces	Widefield eyepieces for eyeglass wearers (8.33×, 10×, 12.5×) Dioptric setting ±5 with adjustable eye cup
Objectives	Leica OptiChrome™, WD 175 mm, APO Leica OptiChrome™, WD 200 mm, APO Leica OptiChrome™, WD 225 mm, APO (WD = working distance)

#### ILLUMINATION

Main lamp	LED
Coaxial OttoFlex™	Two halogen lamps 12 V / 50 W
Quick-change lamp mount	With two 12 V / 50 W halogen lamps for coaxial OttoFlex™

#### LEICA F20 FLOOR STAND

Туре	Floor stand with 3 friction brakes	
Balancing	Continuously adjustable gas spring	
Load	Max. 11.5 kg accessories attached to the microscope	
Reach	Max. 1480 mm	
Vertical range	650 mm	
Transport height Min. 1940 mm		
Weight	Approx. 270 kg as a fully configured system	
XY-unit	Motorized, movement range 50 × 50 mm, with automatic reset	
Tilt mechanism Motorized, +15° / -50°		
Hand switch/Foot switches	16- or 12-function foot switch with controls arranged longitudinally or transversally, wired or wireless	
,	12-function hand switch	
Control unit	Two-in-one display: control and video display in one. The latest electronic control for the continuous governing of all motor functions and the light intensity. Data shown by means of LCD, with adjustable contrast and brightness. Operation by modern touchpanel control. ISUS™ Intelligent Setup System, menu selection based on unique software for user specific configuration, with built-in electronic auto-diagnosis and user support.	

M822

Leica



#### LEICA F40 FLOOR STAND, LEICA C40 CEILING MOUNT, LEICA CT40 TELESCOPE CEILING MOUNT

ELICA C140 TELESCOPE CELEMO MOONT		
Туре	Floor stand with 4 electromagnetic brakes	
Balancing	Continuously adjustable gas spring	
Load	Max. 12.2 kg accessories attached to the microscope	
Reach	Max. 1492 mm	
Vertical range	846 mm	
Transport height	Min. 1949 mm	
Weight	Approx. 330 kg as a fully configured system	
XY-unit	Motorized, movement range 50 × 50 mm, with automatic reset	
Tilt mechanism	Motorized, +15° / –50°	
Hand / foot switches	16- or 12-function foot switch with controls arranged longitudinally or transversally, wired or wireless	
	12-function hand switch	
Two-in-one display: control and video display in one. The latest electronic continous governing of all motor functions and the light intensity. Data sh of LCD, with adjustable contrast and brightness. Operation by modern to control. ISUS™ Intelligent Setup System, menu selection based on unique user specific configuration, with built-in electronic auto-diagnosis and use		

#### **HD IMAGING**

For more information, please refer to your local Leica Microsystems Sales Representative.

#### **STANDARDS**

Council Directive 93/42/EEC on Medical Devices (MDD) and its amendments. Classification: Class I, in compliance with Annex IX, rule 1 and rule 12 of the directive. Medical Electrical Equipment, Part 1: General Requirements for Safety IEC 60601-1; EN 60601-1; UL60601-1; CAN/CSA-C22.2 NO. 601.1-M90. Electromagnetic compatibility IEC 60601-1-2; EN 60601-1-2. The Medical Division, within Leica Microsystems (Schweiz) AG, holds the management system certificates for the international standards ISO 9001, ISO 13485 and ISO 14001 relating to quality management, quality assurance and environmental management.

#### **ACCESSORIES**

Assistant attachment	Stereo assistant attachment	
Beamsplitter	50% / 50%, 70% / 30%, Leica Rotatable Beamsplitter	
	Leica 2D video systems	
	Leica MDRS4 digital recording system	
TV / Photo	Leica Zoom Video Adapter (VA) f = 35 – 100 mm, Manual VA 55/70 mm, Remote VA 55/70 mm	
	Photo/TV dual attachment: f = 60/85/107 mm for TV, f = 250/350 mm for 35 mm camera	
	Photo tube f = 250/350 mm	
Well I I i	Leica RUV800	
Wide-angle observation	Interface for Oculus SDI / BIOM	
Inverters (interface)	AVI, SDI, OIVSL, ROLS	
Laser interface	Interface to fit various commercially available lasers, adapters available from laser suppliers	
Slit lamp  Motorized travel ±23°, slit width 0.01 – 15 mm, length 3 – 15 mm, rotatabl lamp changer		
Imaging	Leica DI C800 high resolution true color digital imaging module for data display, 1024 × 768 pixel resolution	
IOL Placement	Leica ToricEyePiece	
	Variable angle 0° – 180°	
	Variable angle 30° – 150°	
Binocular tubes	Variable angle 10° – 50° UltraLow™ II	
binocular tubes	Variable angle 10° – 50°	
	Variable angle 5° – 25°	
	Inclined angle 45°	
	wired 16- or 12-function foot switch with controls arranged longitudinally or transversally	
Hand / foot switches	wireless 16- or 12-function foot switch with controls arranged longitudinally or transversally (optional)	
	12-function hand switch	
Asepsis	Sterilizable protective glass for the objective, sterilizable components for all drive knobs, commercially available drapes	
Network (optional)	DICOM compatibility for both videos and still images, archiving to patient records with Leica MDRS4 / Med X Change HDMD®	
	1	





### **PROVEO 8**



PROVEO 8



- Fusion Optics
- CoAx4 constant red-reflex
- Intuitive set-up
- Open platform

The Proveo 8 ophthalmic microscope provides the exact image you need at each moment of your procedure. Like a precision timepiece every element of the Proveo 8 microscope interconnects and works in perfect synchrony to optimize your view.

Don't waste time re-adjusting your microscope during anterior or posterior surgery – work interruption-free with the Proveo 8.

See more detail without refocusing thanks to FusionOptics technology. Benefit from constant red reflex with CoAx 4 illumination. Just one foot-tap optimizes your view during each surgery phase thanks to pre-programmed settings plus a host of other workflow features. Make better informed decisions, fast by extending your microscope with digital guidance and imaging technologies

#### OPTICS AND ILLUMINATION

OFFICS AND ILLUMINATION		
FusionOptics	For increased depth of field and high resolution for main surgeon and assistant	
OptiChrome optics	For high contrast, high resolution, natural colors without chromatic aberrations	
Magnification	6:1 zoom, motorized	
Total magnification	4.1× to 24.5× with 10× eyepiece 5.1× to 30.7× with 12.5× eyepiece	
Focus range	75 mm	
Objective / working distance	WD 175 mm/f = 200 mm WD 200 mm/f = 225 mm WD 225 mm/f = 250 mm WD: Working distance, f: Focal length	
Field of view	51.4–8.6 mm Ø with 10× eyepiece	
Eyepieces	Wide-field eyepieces for persons wearing glasses 8.3×, 10× and 12.5× dioptric adjustment, ± 5 diopter settings, adjustable eyecup	
Direct illumination with 2 LED lamps	Main light  Integrated LED illumination system for intensive uniform illumination of the field of view  Continuously adjustable brightness with halogen-like color temperature	
	CoAx 4 coaxial illumination  Illumination unit for generating a clear and stable Red Reflex, decreasing stray light through the sclera and increasing the image contrast  Integrated keratascope and slit illumination  Conversion filters allow surgeon to select preferred color temperature of main illumination	
Adjustable CoAx 4	Diameter of coaxial illumination is adjustable between 4 and 23 mm via footswitch	
Fine focus	Available for assistant and integrated camera or external 1/3 camera with C-mount interface	
	I .	

#### **UPGRADEABILITY**

OpenArchitecture	Prepared for integration of video camera systems, digital recording and imaging systems such as IOLcompass, EnFocus OCT, and monitors	
Connectors	Numerous built-in connectors for video and control data transfer     Internal power supply 12 VDC, 19 VDC, 24 VDC and AC terminals	
2D/3D HD Video	Optional fully integrated 2D HD and/or 3D HD video and recording	

#### **MANEUVERABILITY**

Optics	• 360° rotation	
	• 15° /+ 105° motorized inclination tilt	
XY speed	Zoom linked XY speed	
XY range	62 × 62 mm	
Balancing	Adjustable gas spring via balancing knob	
Brakes	Floor stand with 4 electromagnetic brakes	
Monitor arm	860 mm flexible arm with 4 axis for rotation and inclination, max. weight 15 kg and up to 32"	







#### CONTROL

Control unit	<ul> <li>User-friendly, individually programmable touch-screen (up to 30 surgeons) for control of motor functions and light intensity</li> <li>Menu selection based on unique software for user-specific configuration</li> <li>Built-in electronic auto-diagnosis and user support</li> <li>Software independent hard keys and indicator for illumination</li> <li>Data shown by means of LCD</li> </ul>	
Control elements	Rotary handles  • 14-function and 12-function wireless footswitch with optional back-up cable	
IR sensor	Remote control of the HDR recorder	
Indicators	LED for video record status     Surgeon information panel for setting status	

#### **CONSTRUCTION**

Floor stand	Four 360° rotating castors (Ø150 mm), parking brake	
Materials	<ul><li>Coated with antimicrobial paint</li><li>Conforming with RoHS</li></ul>	
Load	<ul> <li>Floor stand max. 8.0 kg from microscope dovetail ring interface</li> <li>C42/CT42 max. 8.0 kg from dovetail ring interface</li> </ul>	
Weight	Floor stand approx. 350 kg without load C42 ceiling mount total approx. 260 kg CT42 telescope mount total approx. 200 kg	

#### TECHNICAL DATA

Power connection	<ul> <li>1100 VA 50/60 Hz</li> <li>100-240 V~ 50/60 Hz</li> <li>2 × T10 AH 250 V</li> </ul>
Protection class	Class 1







### **VX40 FULL AUTOMATIC LENSMETER**

Visionix wave front technology allows you to have a full detailed analysis of a frame at the push of the button. Experience the next generation autolensmeter with the VX40. The VX40 can detect and analyze single vision, bifocals, and progressive lenses and is compatible with all lens technologies and brands.

#### **FEATURES AND BENEFITS**

#### **Fully Automated**

The VX40 is fully automated. After the operator places the frame and initializes the start procedure, lens analysis and measurement is completely automatic. Even left / right eye movement requires no user input.

#### Easy to use

The unique lens holder system allows for fast insertion of the frame with only one hand! After pushing the start button the whole process works on it's own. The VX40 allows you to spend more time with your patients and less time with analysis.

#### **Automatic Lens Analysis**

The VX40 detects all types of lenses including bifocals, progressives, freeform, and single vision lenses. It is compatible with virtually every lens technology and brand.

#### **Complete Visual Analysis**

The VX40 analyzes progressive and freeform lenses and then conveys the measurements to the operator in the form of a visual topographic map of the power ranges across the lens. These lens types no longer have to be a mystery to you.

#### Side By Side Progressive Lens Analysis

The lens is studied completely which allows for the operator to pick any point on the lens to verify the power and accuracy of the manufacturing. Compare and analyze even freeform progressive lenses and show your patients the differences between different progressive lens designs.



#### **MEASURABLE RANGE**

Number of analyzed points	Up to 1350
Sphere power	-15 ~ +10D (step 0.01, 0.06, 0.125, 0.25D)
Cylinder power	0~10D (step 0.01, 0.06, 0.125, 0.25D)
Cylinder axis	0~180° (step 1°)
Addition power	0~± 3.5D (step 0.01, 0.06, 0.125, 0.25D)
Prism power	0~± 10 Δ (step 0.01 Δ)
PD measurement	Mono / Bino
Cylinder	-, +

#### **GENERAL**

Printer	Internal
Screen	LCD/16M colours, 7"
Light source	LED – 730 nm
Working conditions	10 to 40°C
Data output	RS-232, Bluetooth

#### **GENERAL DATA**

Height	455 mm (17,90 in.)
Width	220 mm (8,66 in.)
Depth	240 mm (9,44 in.)
Weight	9 kg (20 lbs)
Power supply	115/230V
Standards	CE

Connect to the Visionix Digital Refraction

















### **VX90 WITH AUTOFOCUS**

The VX90 is an ophthalmic diagnostic device with refraction and keratometry functionalities as well as accurate of cataracts. A moving fixation target with auto fogging allows the patient to fully desaccommodate in order to get the patient refraction in any conditions.



Height	480 mm (18.9 in)
Width	288 mm (11.3 in)
Depth	500 mm (19.7 in)
Weight	14 kg (30 lbs.)
Standard	CE0120 classe 1m

#### **FEATURES AND BENEFITS**

#### **Fully Automated**

The VX90 is an ophthalmic diagnostic device, automatic autorefractometer and keratometer enables the user to:

VX90 AR WITH AUTOFOCUS

Luneau Technology

- · Measure the refraction of the eye by indicating sphere, cy-
- · Measure the keratometry: central and peripheral keratometry
- Measure the pupil diameter
- Be aware of the presence of cataracts by using backlighting for internal opacity detection

- · Specifically move the fixation target for peripheral keratometry (4)
- Tiltable LCD
- Alignment Indicators
- Printer: Easy Load Paper function and automatic cutting
- Motorised Chinrest
- One-Touch Lock
- WIFI connectivity

#### **GENERAL**

Target Fixation	Auto fog system
Measurement data display	7" TFT colour LCD with touch screen (800x480)
PD Measurement	85 mm measuring range max, 1 mm display unit
Measurement data recording	Built in thermal printer
External output terminal	RS232/WIFI
Power source, power consumption	110V-240V AC, 50/60 Hz, 50 VA
Standards	Compliance with Medical Device Directive 93/42/EC

#### MEASUREMENT SPECIFICATION

Power Range	-20 D to +20
Power Accuracy	+/- 0.25 D
Astigmatism range	0 to 10D
Astigmatism accuracy	0.25 D
Axis range	0° to 180°
Axis step	1°
Axis accuracy	+/- 5°
Pupil diameter measured	2,5 mm minimum

#### KERATOMETRY SPECIFICATIONS

Corneal radiusrange	5 mm to 10 mm
Corneal refractory power	33D to 67D (n=1.3375)
Power repeatability	0.03 mm
Corneal astigmatic power	0 to 12 D
Astigmatism accuracy	0.02D
Axis range	0° to 180°
Axis step	1°
Axis accuracy	+/- 5°
Measurement diameter	2 mm to 12 mm
Peripheral keratometry	Nasal, temporal, up, down











### VX110 PLACIDO TOPOGRAPHER

The VX110 is a multimodal platform, combining Auto-Refraction/Keratometery with a Placido topographer. The VX110 offers multiple functionality with space saving practicality. The VX110 offers high resolution and high accuracy offering more than basic refraction. This provides eye care professionals the opportunity to embrace the cornea and refractive process and deliver an easier and more complete testing procedure for clinician and patient.



Height	570 mm
Width	312 mm
Depth	530 mm
Weight	25kg
Voltage	100-240 VAC, 50/60Hz, 300W

#### **FEATURES AND BENEFITS**

#### Maximise your customer experience with a complete refraction

VX110 PLACIDO TOPOGRAPHER

Luneau Technology

The VX90 is an ophthalmic diagnostic device, automatic autorefractometer and keratometer enables the user to:

- Objective day and night refraction measurements
- 1300 points points analyzed for a 7-mm diameter pupil
- · Objective refraction under mesopic and photopic conditi-
- Measures lower-order and higher-order aberrations
- · Access visual acuity and quality of vision on a pupil as small as 1.2 mm
- MTF\*curve (\* Modulation Transfer function)

Accurate measurements of different pupil sizes give more information and provide a day refraction and a night refraction.

In this instance, between pupil diameters of 3.0 mm and 5.0 mm, the refraction is different

#### **GENERAL**

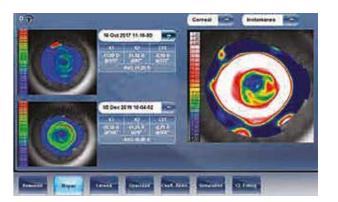
Alignment	Auto fog system
Display	7" TFT colour LCD with touch screen (800x480)
Observation area	85 mm measuring range max, 1 mm display unit
Medical device directive	Built in thermal printer
Output	RS232/WIFI

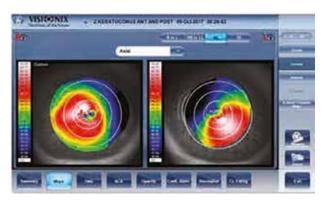
#### POWER MAPPING AND REFRACTION

Spherical power range	-20D to +20D
Cylinder power range	0D to + 8D
Axis	0 to 180°
Measuring area	Min. ø 2mm - Max. 7mm (3zones)
Number of measuring points	1,300 points
Acquisition time	0.2sec
Method	Shack-Hartmann

#### RETROILLUMINATION **CORNEAL TOPOGRAPHY BY SPECULAR REFLECTION**

Number of rings	24
Number of measuring points	more than 100,000
Diameter of covered corneal area	From 0.33 to 10.0 mm
Measurement range	From 37.5 D to 56 D
Repeatability	0.03 D
Method	Placido rings









#### SUOER

### **SW-800 HANDHELD VISION SCREENER**

Size

Display

Weight

Optional accessories

SUOER Opto-Cam (SW-800) is a Simple and fast visual parameter screening instrument both monocular and binocular. SW-800 Opto-Cam measures both eyes simultaneously just like taking a photo. This device is designed to detect vision issues for patients aged 3 months through adults. A total of 8 different binocular measurement can be attained within two seconds (hypermetropia -myopia - spherical equivalent - astigmatism - pupil distance -esophoria -exophoria -anisocoria). Wifi and USB connection and wireless printer included.



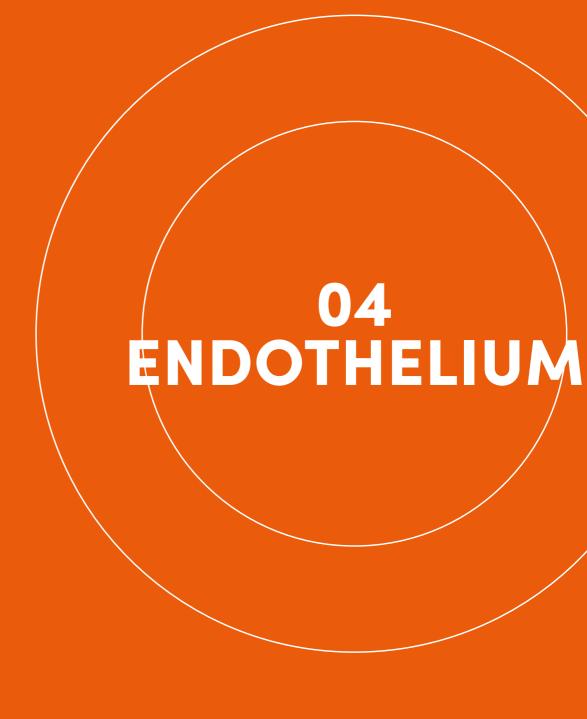
TECHNICAL DATA	
DS	
Range	-8.50D to +8.50D
Resolution	0.25D/0.01 D
Accuracy	±0.50D
DC	
Range	0.00D to 4.50D
Resolution	0.25D/0.01 D
Accuracy	±0.50D
AXIS	
Range	1° to 180°
Resolution	10
Accuracy	±50
PUPIL SIZE	
Range	3.5mm to 9.0mm
Resolution	0.1mm
Accuracy	±0.1mm
PUPIL DISTANCE	
Range	35mm to 80mm
Resolution	1mm
Accuracy	±1mm
Gaze	0° to 20°
Measuring distance	1m±5cm
Time per measurement	~1s
Fixation target	Light flash, attractive sound
Date interface	Wi-Fi, USB
Printer Interface	USB
Battery	Rechargeable lithium batteries, 6 hours of duration, Replaceable

180mm x 130mm x 110mm

Camera tripods, printer, etc

5 inch touch screen

0.8KG



### **SW-7000 SPECULAR MICROSCOPE**

SUOER Specular Microscope is a precision optical instrument that integrates autofocus shooting system, illumination, imaging system, image processing system, and auxiliary system. Non-contact, fully automatic focusing during measurement and automatically capture corneal endothelial cells and measures the thickness of the cornea. At the same time, the instrument passes a highly efficient and rapid corneal endothelial cell image analysis software, which analyzes the captured images for detailed examination of the corneal condition.







#### **TECHNICAL DATA**

165X±10%
0.27mm*0.54mm
0.4mm - 0.75mm ± 0.01mm
Auto/Semi-Auto/Manual
The center and 6 peripheral points
(2, 4, 6, 8, 10, 12-o'clock positions)
AC220V
100VA
530mm*300mm* 460mm
23Kg

SW-7000 SPECULAR MICROSCOPE

SUOER

#### THE FUNCTION OF SOFTWARE

Analysis Method	L-COUNT
Analysis Parameters	Number of cells, CD, SD, CV, AVG/ Max/Min, 6A, SEM, Shape Factor
Histogram	Area (Polymegathism) Apex (Pleomorphism)
Additional Functions	Auto/Manual Repair the Cell Edge, Coloring, Magnifying, Automatic Analysis functions, etc
Classification statistic	According to the cell area and cell edges number

FEATURES	
Focus Method	Focus by Double CCD 30 Auto Focus
View Range	Observe the eyeball and endothelial at the same time
Measuring Method	Non-contact
System Advantages	Fast measuring system More security and convenience
Additional Data	The corneal thickness value displa Integrated multiple analysis and measurement tools y
Capture Mode	Auto/Semi-Auto/Manual
Display	10.1" FHD (1080p) LCD Color Touch Screen
Data Output	USB-Ax2, WiFi/LAN, Bluetooth

### **PERSEUS**

Fully automated, non-contact endothelium analysis, comfortable touchscreen operation and wide measurement range





#### Minimum light, maximum comfort

Perseus ensures maximum patient comfort due to the low intensity the light source.

#### Friendly user interface

The examination is controlled easily by very user-friendly touch screen alignment.

#### Fast and accurate

Non-contact examination, auto-alignment and automatic vertices-based analysis of the endothelium layer within a few seconds, makes working with the Perseus smart, professional and accurate.

#### Latest technologies

The latest hardware and software technologies have been used to develop this new instrument. An excellent CCD camera is used to get bright and high contrast endothelium pictures; a software algorithm is used to get the best focused image. An advanced editing tool is available for pictures acquired from high-damaged eyes.

#### Wide measurement area

The wide measurement area makes it possible to count up to 300 cells (average value on normal eyes) and enables the analysis software to get a reliable cell density along with the analysis of cell size and shape.

#### Seven measurement areas

images can be taken at 7 positions (single centre position and six peripheral points).

#### **High magnification**

during analysis makes it possible to zoom into the image seeing the limit of each cell in detail. This enables the user, via touch screen navigation, to edit individual cells.



#### Software features

the intuitive software evaluates all relevant endothelium data such as:

- Number of counted cells
- Cell density (number of cells per 1 mm²)
- Average dimension of analysed cells
- Standard deviation of analysed cell dimension
- Coefficient of variation
- Statistical distribution of sizes (polymegathism) and shapes (pleomorphism)

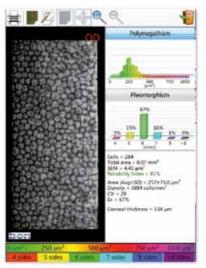
#### Data management

is integrated stand-alone in Perseus software on via network to share the data management with existing b o n archives.

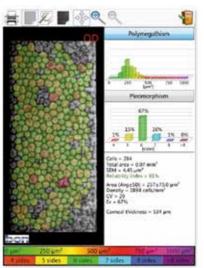
Data can also be transferred – via network connection – to a dicom (Digital Imaging and Communications in Medicine) compatible server.

#### **Pachymetry**

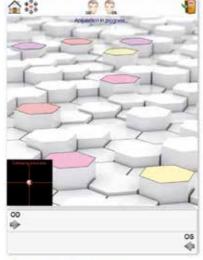
non-contact pachymetry is performed on every picture acquisition.



△ analysis



△ analysis with marked cells



△ acquisition screen





### **AP-300**

#### Automated perimeter



Height	637 mm
Width	566 mm
Depth	420 mm
Weight	23 kg

AP 300 is a modern and innovative Automated Perimeter that meets global standards for excellence around visual sensitivity testing, diagnosis and management of eye disease. AP-300 platform of advanced diagnostics uses Kinetic and Static Perimetry, including white/white perimetry, blue/yellow (SWAP - Short wavelength automated perimetry) and Flicker (critical flicker fusion perimetry) for early glaucoma detection plus real Goldmann Kinetic Perimetry.

AP-300

Frey

AP-300 comes standard with an extensive range of strategies, fields and test parameters. Built-in camera completed by automated eye tacking provides reliable automated fixation control. Standard built-in data capture and analysis include regression analysis of the visual field on the basis of examination results. Easy to navigate, intuitive software allows easy operation and is designed to be operated using the touch screen. AP-300 design includes built-in high quality PC computer

- · Frey Perimeter
- · Rapid testing times
- Accurate results
- User friendly software
- Improved patient comfort • Complete analysis modes
- Multiple test capabilities
- Networking

#### **TEST SPECIFICATIONS**

Maximum temporal range (degrees)	80
Stimulus duration	0.1 - 9.9s
Visual field testing distance	30 cm
Background illumination	31,5 ASB

#### **TEST MODES**

Supra threshold age corrected (Screening)	•
Single intesity	•
Full intensity	•
Fast threshold	•
Smart threshold	•
2-Zone, 3-Zone, Quantify Defect, Neurological	•

#### SPECIAL TEST LIBRARY

Bi-Driving, Industrial Medicine, monoular, binocular	•
Peripheral	•
Kinetic testing	•
Blue-on-Yellow (SWAP)	•
Custom testing	•

#### **TEST FIELD LIBRARY**

24-2, 30-2, 10-2, Macula	
Nasal step (Glaucoma)	•
Central 10, Central 20, Central 30, Macula	•
Peripheral	•

#### **COMPUTER**

Build-in PC	•
Touch screen suport	•
Fixation control	•
Heijl Krakau blind spot monitor	•
Eye tracking (video camera)	•
Eye preview (video camera	•

#### **STIMULUS**

White on white	•
Green on white	•
Red on white	•
Blue on white	•

#### **GENERAL TESTING FEATURES**

Stimulus size (Goldman size)	I-V
Fovea threshold testing	•
Automatic piupil measurement	•

#### **ADDITIONAL SOFTWARE FEATURES**

Network connectivity	•
DICOM export	•
Targeted perimetry (merging tests with fundus images)	•
Fast threshold strategies	•
Time adaptive algorithms	
Regression analysis	
Printer	External or network printer



<u>M-700</u>



Soon available





### **NEXY FULL AUTOMATIC**

#### Capture crystal clear retinal images in a fully automatic way

#### Nexy: retinal screening at a glance

- Fully automated
- Meets social distancing guidelines
- Al compatible

#### Exclusive technology

Nexy utilises an innovative cross-polarized light technology that provides excellent image quality while maintaining a compact footprint.

#### Nexy value-added features

- · Robotic movements: auto-alignment, autofocus and auto-capture. Just press Start and Nexy does the rest
- Automatic capture of high-quality images for detailed screening and evaluation with minimal personal training
- Pleasant aesthetic: small footprint and ergonomic design
- · Modern gesture interaction: the intuitive interface facilitates a quick start and smooth navigation
- Review images from a local PC (in .DCM format as well as jpg/png format) or from an intranet PC
- · Review images from the Next Sight website using a personal and secure account
- Teamviewer application for remote assistance



#### **TECHNICAL SPECIFICATIONS**

HARDWARE SPECIFICATION	
Field of view	45°
Field of view with mosaic function	90°
Retinal resolution	14 microns
Fixations	7 fixations set-ups
Tablet dimensions	10.4"
Weight	32,4 lbs
Size	13,4 x 16,9 x 18,1 in.

**NEXY FULL AUTOMATIC** 

Luneau Technology

#### SOFTWARE SPECIFICATION

Image filters (vascular, choroidal, nerve fibre, red free)	
Cup-to-disc ratio for glaucoma screening	
Automatic mosaic function	
Shared intranet folder	
DICOM standard compatible	
Fundus adapter to transfer images to a local pc	

#### **DATA MANAGEMENT**

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Full AI integration (option)	
Cloud-based secure storage	
Client-side data encryption	
Automatic database backup	
Review images from the password protected website, a network shared folder or a local PC	
Multilevel account	
Access by personal user	

### **SW-8800 NON-MYDRIATIC**

The SW-8800 is non-mydriatic fundus camera with built-in computer for retinal observation. It has the ability to display the fundus up to 45 ° degrees. It has a 10 MP CCD camera with LED flash as well as 9 focus points for photographing the retinal region. It is a compact device with high quality images, stereoscopic depth perception and the ability to capture a 65° angle of single fundus photography without dilatation.

#### **TECHNICAL DATA**

GENERAL	
Type of Photography	Color / Red-Free(Digital)
Angle of View	IR(Digital) / Cobalt(Digital) 46.5°
Minimal Pupil Size	3.5 mm
Focus Adjustment Range	-25 to +250 (Without Compensation Lens)

#### LIGHT SOURCE

Observation Light Source	Infrared LED
Flash Light Source	White LED

#### **EYE FIXATION LAMP**

Internal	LED Point, Orange
External	LED Point, Red
Working Distance	15 mm
Camera Resolution	10 Megapixels
Built-in Monitor	7.0 inch Color LCD Monitor

#### MOUNT MOVEMENT

Front and Back 85 mm	
Side to Side 11 0 mm	
Up and Down 30 mm	
Chin Rest Movement: 60 mm	

#### **ELECTRICAL AND ENVIRONMENTAL**

Power Supply	1 00V to 240V AC, 50/60Hz, 1.3 to 0.6A	

#### **OPERATING ENVIRONMENT**

Temperature	5 to 40°c
Humidity	≤ 80%
Atmospheric Pressure	700 hPa to 1060hPa

#### PHYSICAL CHARACTERISTICS

Dimensions (W x D x H):	430 x 450 x 570 mm
Weight	Approximately 10Kg

#### OPTIONAL: FA, MOSAIC, AF (COMING SOON)





### **SW-8000 WIDEFIELD ROP CAMERA**

The SW-8000 ROP Screener and ROP Screener Portable (SW-8000/SW-B000P) are world's first Wide Field Color Retinal Camera with Built-in Fluorescein Angiography for Retinopathy of Prematurity. Widefield imaging system with 130° wide area. It is characterized by high central field resolution 30 lp / mm and led light source. Portable compact device capturing high-resolution images and the benefit of video recording. Simple to operate and a USB 3.0 compatible device can easily work with any laptop. Suitable for various screening scenarios.

#### Characteristics

- 10 MP CCD camera
- LED flash
- Fluoroangiography (FA) (optional)
- Autofluorescence (optional)
- Mosaic 128 degrees
- Dicom
- · Ability to connect to HDMI on any monitor



#### **TECHNICAL DATA**

SW-8000 ROP is a Wide Field camera, very light with easy handling. Is integrating Light Source, Refractive compesation and High resolution Imaging system

SW-8000 WIDEFIELD ROP CAMERA

SUOER

8.1 mm (smallest probe in the market)
527.3gr (the lightest in the market)
USB3.0 Plug & Play
135° to 144°
Color Light Source; Fluorescence Angiography
≥ 30 lp/mm
(±22.5°) ≥ 20 lp/mm
(±45°) ≥ 15 lp/mm
white LED

# RETICAM 3100 NON-MYDRIATIC AUTOMATIC FUNDUS CAMERA

SYSEYE offers a Fundus Camera with AF & FA. It is a fully automated device (the first robotic AF & FA Fundus Camera worldwide), with 135 degrees Mosaic function, the widest field of view in the market! The system has a 24MP image resolution, a Real Red Free filter (not software addition). RetiCam 3100 can be ordered either with autoflorescence module (AF) or with fluoroangiography module (FA) (not combined)

#### **IMAGE ACQUISITION SYSTEM**

Acquisition modes	Non-mydriatic/ mydriatic Anterior photography Red-free ( optional ) FFA (optional) FAF (optional)
Field of view	50°
Working distance	35mm
Minimum pupil size	≥3.3mm
Focus modes	Auto / manual
Exposure modes	Auto / manual
Operation	Auto / manual
Photography	SLR camera
Image resolution	24 megapixels
Diopter compensation	±25D
Fixation	External fixation / internal fixation
Autofocus assist light	Infrared LEDED
DICOM 3.0	Yes
Customization AI port	Yes

#### **OTHERS**

Dimensions	380mm ( L) x 550mm ( W) x 475mm ( H)
Weight	26.5kg
Power supply	100-240V 50/60Hz

#### Characteristics

- 135° Wide-field 9 position mosaic
- Dual Camera system
- Multifunctional software system
- Dicom compatible
- Angio Fluo or Fluoangiography available









#### 135° Wide-field

Mosaic function can generate a fundus image up to 135° of view from 9 images of 50° width each. More fixation points are distributed between 9 internal fixations shown.

#### Dicom 3.0 / Lan export

- Supports Dicom agreement, connect to hospital PACS system.
- LAN-sharing, any computer terminal can real-time display image taken by host.
- USB expand storage.
- Remote transmission by FTP system

#### **Multifunctional Software**

Powerful image processing function, aquire lesion area and cup disc ratio easily .

Gamma, contrast, brightness, color of image can be adjusted, according to doctor requirement.

#### Non-mydriatic design

Fundus image can be aquired for pupils as small as  $3.3 \,\mathrm{mm}$  in Small Pupil Mode , which is appropraite for patients with small pupils .







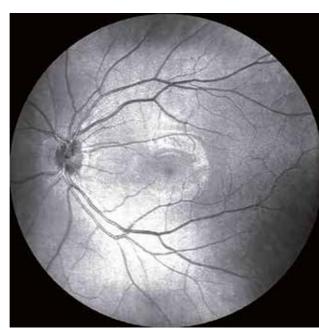
### **MOCEAN-4000 OCT WITH ANGIOGRAPHY**

Mocean 4000 captures 100 images in less than one second, and merge them together to create a high definition image with minimized speckle noise 5  $\mu$ m axial optical resolution (3  $\mu$ m digital). High definition OCT imaging reveals hidden pathological changes .

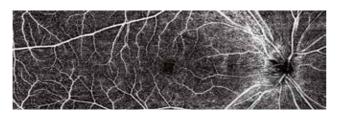


#### SUPERIORITY DUE TO ORIGIN HD SLO + EYE TRACKING

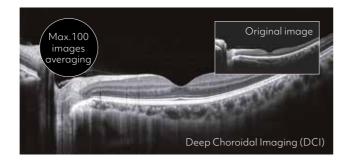
- 45° wide range live SLO imaging
- Ultra fine quality retinal imaging using averaging technique (up to 50 images)
- SLO-based real-time retinal tracking effectively reduces artifacts caused by eye movement



Real-time widefield SLO image



HD OCT IMAGING SYSTEM AT 80,000 A-SCANS/S



#### **CLINICAL IMAGE COLLECTION**

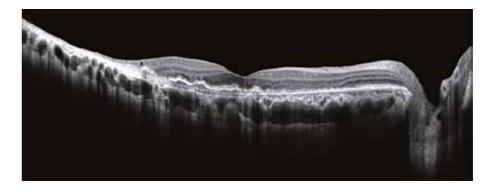
#### MACULAR HOLE

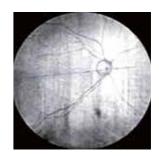




Complete posterior vitreou intraretinal cysts.

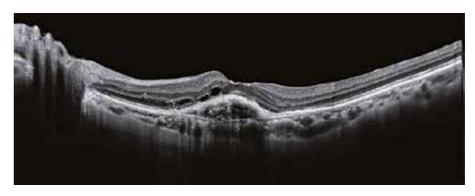
#### DRY AMD





Several RPE elevations in macula and temporal retinal atrophy.

#### WET AMD





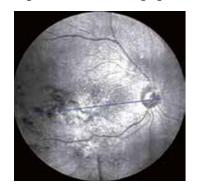
The RPE is discontinuous, and in PED can be seen. Cystoid retinal the lesion.

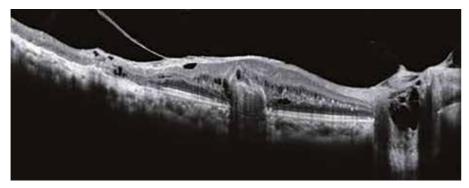


#### MACULA

#### MACULA HD LINE

High definition OCT imaging reveals hidden pathological changes

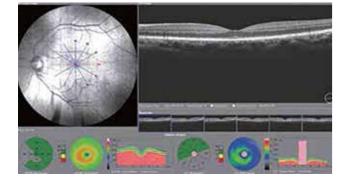




 $^{\star}$  OCT scan range can be switched between 6 mm and 12 mm

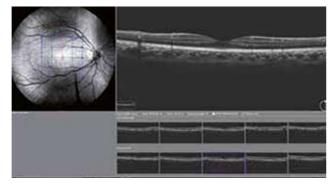
#### MACULA SIX-LINE RADIAL

Have a glimpse of the retina via HD imaging and quick data analysis



#### MACULA MULTI NEW M

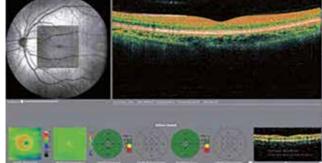
Multiple HD cross-sectional images acquisition



#### MACULA SIX-LINE RADIAL

A point-by-point assessment of retinal thickness with a  $500 \times 100$  dense cube





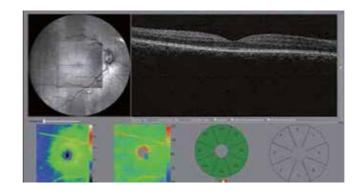
#### Software Analysis

- Retinal thickness analysis
- Retinal volume analysis
- Progression analysis
- 3D view
- En-face analysis

#### **GLAUCOMA**

For comprehensive glaucoma analysis, Mocean 4000 offers two scan patterns, glaucoma cube scan in macular area and glaucoma cube scan in disc area. Evenly distributed sampling point with 200 x 200 A-scans provides reliable information for early glaucoma detection and management.

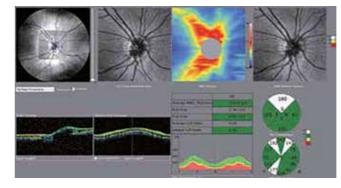
#### GLAUCOMA (MACULAR)



#### Software Analysis

- Ganglion cell analysis
- Progression analysis

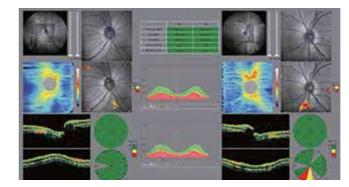
#### GLAUCOMA (DISC)



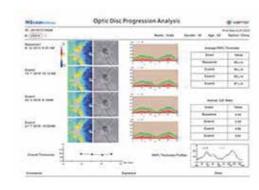
### Software Analysis RNFL analysis

- Cup-disk analysis
- Calculation circle and circle scan tomogram
- Progression analysis
- OU comparative analysis

#### INFORMATIVE REPORT



OU comparative analysis



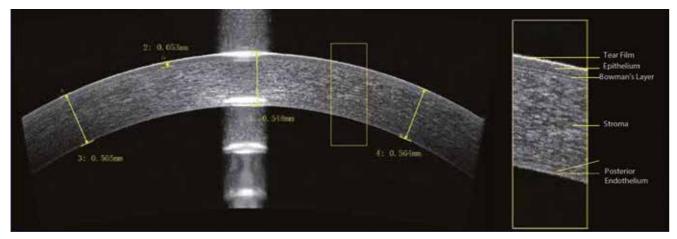
Progression analysis report



#### **ANTERIOR SEGMENT**

#### ANTERIOR HD LINE

High definition OCT imaging reveals hidden pathological changes

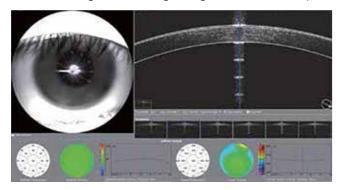


16mm Angle-to-angle scan



#### ANTERIOR SIX-LINE RADIAL

The anterior segment scanning through 6 radial lines of equal length can be used to measure the central corneal thickness



#### Software Analysis

- Corneal thickness analysis
- Manual measurement
- Epithelial thickness analysis

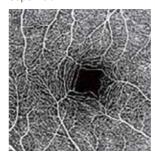
#### **VASCAN OCT ANGIOGRAPHY**

#### Valuable OCTA for routine clinical practice

Optical Coherence Tomography Angiography (OCTA) is a new non-invasive imaging technique that allows the detailed study of flow within the vascular structure of the eye without the need of dye injections

#### En face flow images of segmented layers

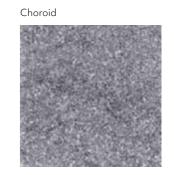
Superficial





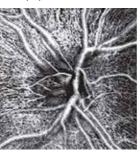


Wide-field OCTA scan



#### OCT Angiography of the Optic Disc

Healthy eye

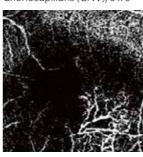


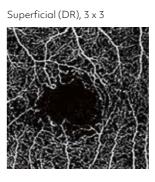


12mm x 8mm OCTA imaging of healthy eye

#### **CLINICAL CASES**

Choriocapillaris (CNV), 3 x 3

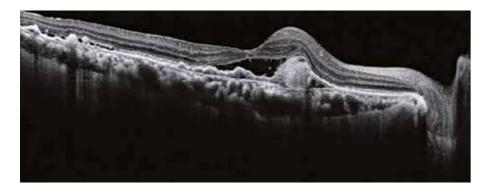


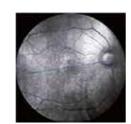






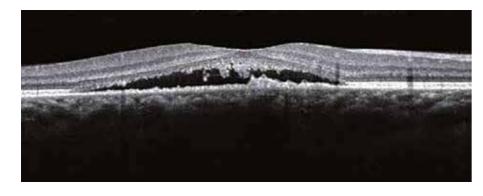
#### POLYPOIDAL CHOROIDAL VASCULOPATHY (PCV)





OCT shows dome-shaped PED with a polypoidal lesion inside, which appears as round mild-to-moderate reflective lumen and moderate-to-high reflective wall. Double layer sign is present in the area of macular and temporally. There is subretinal fluid with several punctate hyperreflectivity.

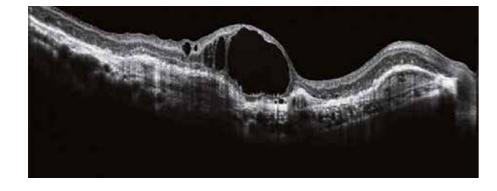
#### CENTRAL SEROUS CHORIORETINOPATHY (CSC)

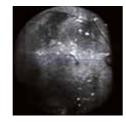




Serous neural retinal detachment in the macula with a mass of granular and stalactite-like moderate-to-high neural retina.

#### DIABETIC RETINOPATHY (DR)





Cystoid macular edema. Several cysts and disordered retinal structure are seen.

#### Front Segment Optical Coherence Tomography (OCT):

- · Auto Pachymetry,
- · Corneal Flap Measurement after laser refractive surgery (LASIK),
- · Ocular angle analysis,
- AIOP, AOD, TISA

#### Front Segment Optical Coherence Tomography (OCT) Wide Scan:

- Angle to Angle 16mm
- · HD Line scan,
- 6 Line Radial Scan
- AOD

### Optical Micro Angiograpghy ( OMAG Algorithm)

#### Automatic detection of a minimum of 8 retinal layers

- Encoded
- Vitreous
- Superficial
- Deepfcial
- Avascular
- Choriopapillaris
- Choroid
- Intermediate
- and Custom defined from Operator Layer
- VASCAN ESSENTIAL with 3X3, 12X8 Modus
- VASCAN ADVANCE with 3X3 6X6 8X8 12X8

Modus and Quantitative Statistical Analysis ( Density , FAZ, Non Flow)

Minimal pupil size: 3.0mm YES

Focus adjustment range: +20D and -20D

#### Fixation target:

- Internal fixation(target position can be changed)
- External fixation

#### All In One PC an integral part of the device / Specs:

- i7 8th generation Intel
- 16GB Ram
- 1 0S0GTC 4GB ATI Graphic
- 120SSD
- 1TB SATA
- 24" IPS Full HD
- 3.0USB
- 3 years warranty for the PC



#### **Detailed Hardware and Software Specifications:**

Optical coherence tomography:	Spectral Domain OCT HD Widefield
Light source of wavelength:	840 nm
Bandwidth of Light Spectrum:	50 nm
Scanning speed:	80.000 scans/sec
Axial resolution:	5μm in tissue ( Optical) / 2.4μm ( Digital)
Transverse resolution	15 µm /3µm
Total scan depth:	3mm
Scanning range:	3mm to 16 mm (line scan anterior)scan
Minimum scan types:	3D, radial, B-scan, raster, cross
Fundus Image:	LSLO (Live Scanning Laser Opthalmoloscope)
Field Of View	45° degree
Real Time Eyetracking:	Yes
Shooting mode:	Semi Automatic with Auto OCT signal detection and Image Auto adjust parameters

#### Retinal analysis:

- RNFL
- Gaglien Cells
- Epithelium Thickness Mapping with Topography Thickness Map
- Cornea Thickness Mapping with Topography Thickness Map
- Automated Pachymetry
- 3D , EnFace
- EDI, Deep Choriod Imaging Modus
- Angle to Angle 16mm
- Macula Cross Beam (Operator can define the disctance to 1  $\mu m)$

### Glaucoma analysis:

- RNFL (thickness of retinal nerve fiber layer),
- ONH (optic nerve head) morphology,
- DOLS (disk damage probability scale)
- Ganglion cells analysis

#### **TECHNICAL SPECIFICATIONS**

#### **OCT IMAGING**

OCT-

Methodology	Spectral domain OCT
Optical source	Super luminescent diode (SLD), 840 nm
Scan speed	80,000 A-scans/s
Axial resolution (optical)	5μm in tissue ( Optical) / 2.4μm ( Digital)
Transverse resolution	15 μm /3μm
A-scan depth	2.4μm 2.5μm
Diopter range	- 20 to + 20 diopters
Scan patterns	Macular: HD line scan (6 / 12 mm), 3D scan (6 mm x 6 mm), 6-line radial scan, Multi (X-Y: 5 x 5) Disc: 3D scan (6 mm x 6 mm)
	Anterior: HD line scan (6 / 16mm), 6-line radial scan

#### **FUNDUS IMAGING**

Methodology	Live scanning laser ophthalmoscopy (LSLO)
Minimum pupil diameter	3.0 mm
Field of view	45° degree

#### VASCAN™ OCTA MODULE

nm x 3mm nm x 6mm	256 x 256 A-scans	3mm x 3mm	256 x 256 A-scans
ım x 6mm			
	360 x 360 A-scans	12mm x 8 mm	540 x 360 A-scans
ım x 8mm	360 x 360 A-scans		
mm x 8 mm	540 x 360 A-scans		
OMAG		C-OMAG	
Encoded, Vitreousretina Intrerface(VRI), Superfcial retina, Deepfcial retinal, Avascular, Choriocapillaris, Choriod, Custom, Intermediate			
5		Not available	
	oded, Vitreousretina priocapillaris, Chorioc	coded, Vitreousretina Intrerface(VRI), Superfcioniocapillaris, Choriod, Custom, Intermediate	coded, Vitreousretina Intrerface(VRI), Superfcial retina, Deepfcial retina priocapillaris, Choriod, Custom, Intermediate

#### **ELECTRICAL AND PHYSICAL**

Weight	30.5 kg
Dimension	532 mm (L) x 360 mm (W) x 540 mm (H)
Source voltage	AC 100 - 240 V, 50 Hz - 60 Hz
Power input	90 VA











Complete and revolutionary refraction system that offers a rapid binocular and dynamic measurement using Wavefront Technology. Revolutionising the practice of refraction. The first EVER binocular dynamic exam



Height	490 mm (19,3 in)
Width	290 mm (11,4 in)
Depth	470 mm (18,5 in)
Weight	25 kg (55 lbs)
Power	100/120, 220/240 V AC, 50/60 Hz
Voltage	230 V 50 / 60 Hz

- More accurate prescription
- Time saving
- Perfect visual acuity in less than 3 minutes

#### **TECHNICAL SPECIFICATIONS**

Output	
• RS232 / USB2.0 / VGA / LAN	

VX25 EYE REFRACT

Luneau Technology

• Embedded bluetooth / Wifi

Hardware	
Tablet	Android
Chinrest	Electrical
Near Vision Target	250-700 mm Mini tablet 7"
Head	Autofocus, autocentering

Range	
Sph	30,00D to +27,25D
Sph step	0,125 / 0,25 / 0,50 / 1 D
Cyl.	-6,00 to +6,00 D
Cyl step	0,25 / 0,50 / 1 D
Optical axis	0 to 180°
Axis step.	1°/5°/10°/45°
Prisms	0 to 20 D

Communication		
WIFI		





### **VX65 AUTOMATIC PHOROPTER**

An essential phoropter to rely on. Do you ever wonder how many refractions you carry out day after day, all year round? We designed the VX65 to tackle the toughest workloads. 20 refractions a day 300 days per year for 10 years. That is 60,000 times less you need to bend over a manual phoropter turning dials and knobs.



#### Connectivity and transmission

- Full data management dashboard to manage your data from external devices (EMR/ARK)
- Import data wirelessly from other devices (such as AR/K and lensometers) via VXbox
- Export refraction data into your EMR system at the touch of a button

#### Precise engineering

- Rugged materials and components for excellent longevity
- Precisely tooled parts for smooth and silent operation
- Speedy lens transitions and startup initialization

#### Long lasting

- · Better components for maximum durability
- Mechanical components tested to handle 60,000 refractions during their lifetime
- Up to 10 years of intensive use

#### Versatile 3-in-1 device: A phoropter that adapts to the way you work.

- Ideal for multi-skilled practices: switch between digital manual phoropter and autophoropter mode any time
- · Control the entire refraction process with either the tablet or an optional ergonomic control panel

#### **TECHNICAL SPECIFICATIONS**

AUXILIARY LENS		
Cross cylinder lens	+/-0.25 / +/-0.5 / dual cross cylinder with split prism (Auto interface) +/-0.25 / +/-0.5 (Manual interface)	
Occluder	Available	
Pinhole plate	ø 2 mm	
Red>green filter	Right eye: red, Left eye: green	
Polarising filters	Linear (45°/135°) / Circular	
Fixed cross cylinder lens	± 0.50 D	
Spherical lenses for retinoscope	+1.5 D / +2.0 D	
Red maddox rod	Right eye: horizontal, Left eye: vertical	
Dissociation prism	Right eye: 6 BU / Left eye: 10BI	
Refraction distance for near vision	150 mm - 700 mm	
Forehead rest adjustment range	12 mm	

VX65 AUTOMATIC PHOROPTER

Luneau Technology

#### **MEASURABLE RANGE**

Sphere	- 29.00 to +26.75 D min step 0.25 - 19.00 to +16.75 D (Cross cylinder test, prism test)
Cylinder	0 to -8.75 d min step 0.25
Axis	0 to 180° min step 1°
PD	50 to 80 mm min step 0.5
Prism	0 to 20 $\Delta$ min step 0,5 $\Delta$

Height	280 mm (11.02 in.)
Width	350 mm (13.78 in.)
Depth	80 mm (3.15 in.)
Weight	3.8 Kg (8.38 lbs)

### **VX50 MANUAL PHOROPTER**

Manual photopter for a complete subjective refraction. For a classic refraction, use the manual phoropter VX50 with its compact and ergonomic design.



### **FEATURES AND BENEFITS**

#### Easy to operate

- · Automated rotation of cross cylinder with the cylinder axis
- · Natural postion for near vision with convergence mouvement

#### High range device

- · Multicoated lenses
- High quality components

#### Auxiliary lens dial:

- (O)-Open aperture (two positions)
- (R)-Retinoscopic lens,+1.50D
- (P)-Polarizing lens (45°- left eye /135°- right eye)
- (WMV) or (RMV)-Maddox rod. Vertical (white left eye / red - right eye)
- (WMH) or (RMH)-Maddox rod. horizontal (white left eye / red - right eye)
- (RL) Red lens (1.12-10.12D sphere)
- (PH)-Pin hole
- $(10\Delta L)$  or  $(6\Delta U)$  - $(10\Delta$  base-in left eye /  $6\Delta$  base-up right
- (±.50)- ±0.50D fixed cross cylinder
- (0C)-Occluder

#### **TECHNICAL SPECIFICATIONS**

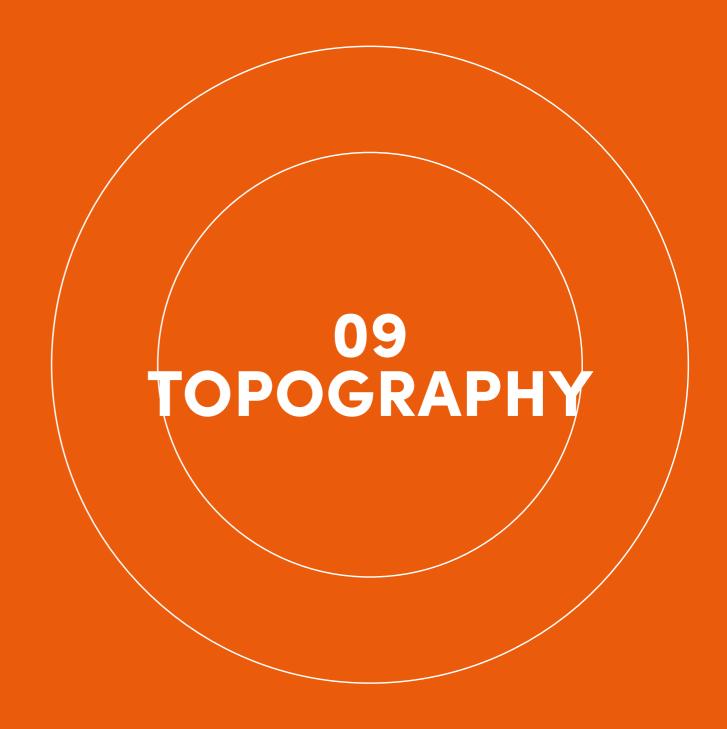
GENERAL		
Lens/eye Distance	13.75 mm	
Head-rest adjustment	16 mm	
Convergence	380 mm (when PD = 64mm)	
Standards	MDD, CE	

#### MEASUREMENT RANGE

Sphere	+16.75 to -19.00D ( Step 0,25D) +26.75D to - 29.00D with additional lenses of +10.00 or -10.00D
Cylinder	0.00 to -6.00D (Step 0,25D)
Axis	0 to 180°
Cross cylinder	+- 0.25D
Rotary prisms	0Δ to 20Δ, Step 1D
PD adjustment	48 to 75 mm, Step 1mm
Accessories	Near point card, holder and reading rod

Height	293 mm (11.5 in.)
Width	318 mm (12.51 in.)
Depth	96 mm (3.8 in.)
Weight	5 kg







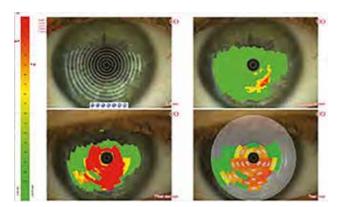
VX205 the new topographer that integrates a high-resolution colour digital camera for advanced analysis of the tear film.

The functions available are:

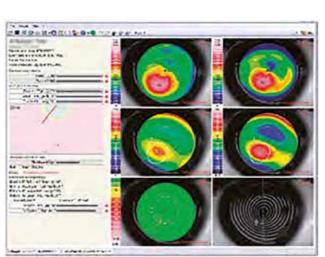
- Keratoconus screening and follow-up
- Pupillography integrated
- · Meibomian Gland analysis
- Tear film analysis
- Tear meniscus measurement
- Fluorescein imaging (blue light 470 nm)

#### **TECHNICAL SPECIFICATIONS**

Placido disc	24 rings
Working distance	78 mm
Measured points	6144
Camera	High-resolution colour digital camera (1024x960 pixel)
Connection to the PC	USB 3
Light sources	White Light for corneal topographs and images and filmed in videokeratoscopy; Blue 470 nm led for images and filmed in fluorescein; IR 890 nm led for pupillography and meibography







### **SW-6000**

The SW-6000 is a corneal topography device for the clinical diagnosis of corneal astigmatism and analysis of the shape of the cornea. Displays the following analysis maps: Axial curvature, Tangential Curvature, Elevation, imitated keratoscope and 3D cornea, on a fixed or custom color scale. It can be used in pre-operative examination and evaluation of post-operative refractive surgery, in the diagnosis of keratoconus and in the application of contact lenses. The device has a Placido cone of 31 rings, 7936 measuring points and accuracy +/- 0.02mm. The cone has a small opening, so that it is close to the eye and avoids shading from the eyelids and nose when taking measurements. The diameter of the measuring area in the cornea is 10.91 mm. It has a desktop base with a chin rest so it can be placed on any table and connected to a desktop PC or laptop.

#### **TECHNICAL DATA**

Measuring Mode	Placido Cone	
Coverage range of measurement	10.91 mm (Diameter)	
Measuring range of Curvature radius	5.Smm-1 0.0mm (33.75D-61.36D)	
Precision	±0.02mm	
Placido Rings	31 Rings	
Measurement Points	7936 Points	
Display	Axial Curvature map,Tangential Curvature Map,Elevation Map, Imitated Keratoscope Map and 3D cornea Map	
Image output	High-Quality color inkjet printer	

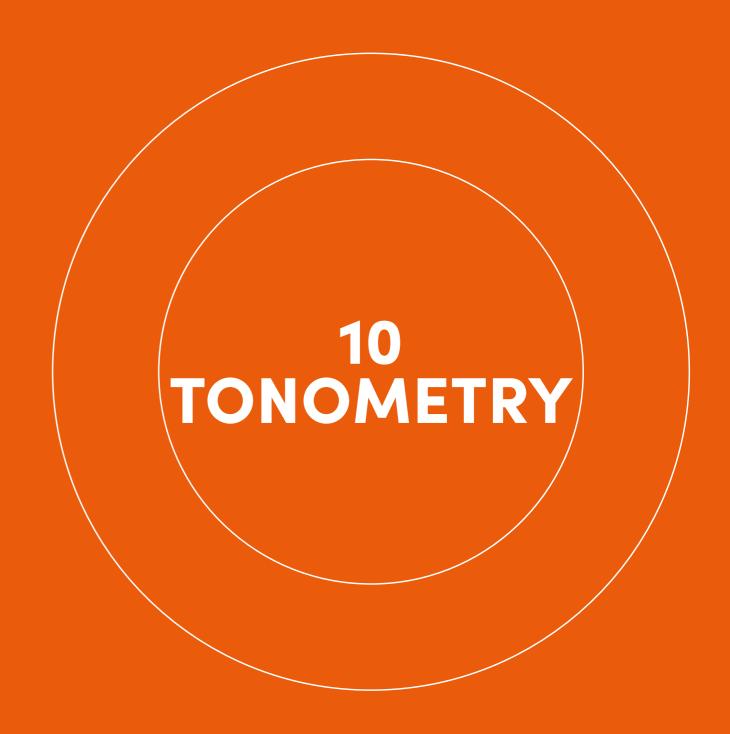
#### Adjust moving range

Left-Right	0 to 86mm
Forward-Backward	0 to 40mm
Up-Down	0 to 30mm
Chinrest	0 to 50mm
Cornea Contact Lenses Fitting	

Function Keratoconus Detectiong Function







### **SNT-700 NON-CONTACT TONOMETER**

Soft Non-contact Tonometer. Capture crystal clear retinal images in a fully automatic way.

#### No surprises for your patients

#### "Air Noise like a gentle whisper"

The noise when air blows from the equipment may be one cause of surprise for patients. The air noise level of the SNT-700 is only 55 dB. Gentle air noise like a whisper assures that patients can be examined comfortably.

#### "Notifying patients of the Measurement timing"

The measuring head moves back and forth for equipment starts measurement. Patients no longer need to be afraid of sudden puffs of air, and relax more during their examination.



SNT-700 NON-CONTACT TONOMETER

**77** Takacı

#### Ensures easy examination for patients

#### "Touch Alignment" starts measurement swiftly

"Please open your eyes wide." "Please do not move." We wanted to reduce any periods of patient discomfort as much as possible. The Touch Alignment of the SNT-700 quickly aligns the eye center with the center of the screen simply by touching the eye shown on the screen. The Auto Alignment and Auto Shot functions then start measurement immediately. This is another vast benefit to patient care.

#### Step 1



Simply touch the pupil center shown on the screen to roughly align the eye center of the screen

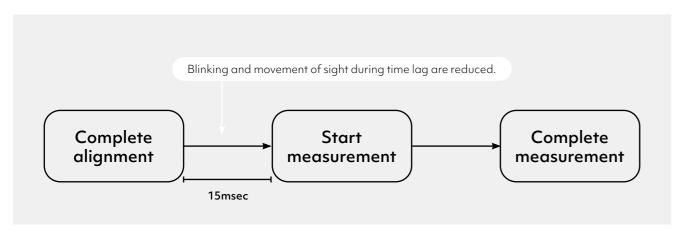
#### Step 2



Lightly press the center of the screen to move the measuring head toward the patient. The Auto Alignment and Auto Shot functions will then quickly complete measurement.

#### "Measurement time lag of only 15 ms" reduces measurement errors and dispersions.

The SNT-700 has reduced the time lag from the completion of alignment to the beginning of measurement to approximately 15/1,000 seconds. Because this improvement reduces measurement dispersion and errors due to blinking or movement of sight during the time lag, patients are not subjected to repeated re-examinations. The SNT-700 is designed to reduce the number of times that air is blown onto the eyes for the benefit of the patient.

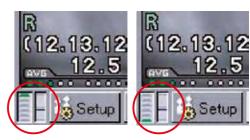


#### "Quick charge" makes consecutive measurements smooth.

When holding a patient's eyelid and taking consecutive measurements, we want to complete the measurements as soon as possible to shorten the time the patient must open their eye. The SNT-700 is equipped with a quickcharge circuit, so there is no stopping the measurement process to charge for the next air blow. This allows you to conduct consecutive measurements smoothly within a short time - one more device to ensure comfort for patients.

### "Chin rest height indicator" allows you to adjust the chin rest height before starting measurement.

Because the height of the chin rest is shown on the LCD monitor, you can adjust the chin rest height before patients position their face. Patients do not need to move their faces up and down on the chin rest with their foreheads against the forehead pad - a particularly nice consideration for ladies with makeup on.



#### "Large measuring head stroke" reduces the adjustment range of the chin rest.

In addition, we have increased the vertical stroke of the measuring head to 45 mm! This larger stroke remarkably reduces the need to adjust the chin rest height and shortens the time required for measurement.

#### Considering safety of patients

#### Reliable "touch sensor"

Even if the measuring nozzle makes contact with a patient, the touch sensor is activated to stop the measuring head immediately. Patients can relax more during examinations.

#### "Digtal limiter" adjustable for each patient

The limiter prevents the measuring head from moving too close to the patient's eyes. The SNT-700 controls the limiter digitally and finely adjusts the optimal limiter position for each patient. The SNT-700 is provided with four safety measures: an "alarm" and "warning screen" when the measuring head becomes too close to the eye, a "limiter" to prevent the measuring head from moving too close to the eye, and a "touch sensor" activated when the measuring head contacts the patient.



#### Consistent measuring accuracy

#### "Constant air pressure" is ensured

The non-contact tonometer is designed to convert the applanation air pressure to intraocular pressure. We have assumed that constant measuring conditions for every measurement are important for stable accuracy, and provided the SNT-700 with a control system to stabilize the air pressure. This system regulates the air pressure to be almost constant.

#### Values can also be displayed in "hpa"

"mmHg" or "hpa" can be selected for the unit of the intraocular pressure. Even if the standard for the intraocular pressure is changed in the future, the SNT-700 will be compatible.



**77** Takacı

#### Making examinations easier

#### "Large color display" and "icons"

Thanks to the 5.7inch color TFT LCD and easy-to-understand icons, even new operators can easily operate the SNT-700.

#### "Comfortable operation" and

#### "correction of intraocular pressure" from the touch panel

It is a little troublesome to delete unnecessary measurements such as error data. However, the SNT-700 allows you to delete this data easily from the touch panel. In addition, the SNT-700 has a function for correcting the intraocular pressure. The intraocular pressure can be corrected simply by entering the measured central corneal thickness of the examined eye.



#### Easing maintenance

#### "Drop-in printer paper" is simple

"Drop-in printer paper"- all you have to do is throw in a paper roll and close the cover. When replacing the paper roll, you just place a new roll and close the cover. There is no need to thread and feed the paper.



### The nozzle is "simply cleaned with a cloth dampened with alcohol"

All you need to do to clean the nozzle is to simply wipe it with a cloth dampened with alcohol. In addition, the important optical components are located in the rear section 32-mm behind the nozzle so that these internal components rarely become dirty.

#### **TECHNICAL SPECIFICATIONS**

IOD magnetic mant	Measuable rage	0 to 60mmHg (0 to 80hPa)
IOP measurement	Measuable unit	mmHg/hPa
Main unit	Built-in Printer	Thermal Printer
	Movable part movement range	Up-Down : 45mm Right-Left : 88mm Front-Rear : 40mm
	Chin-rest Movable range	70mm
	Data output type	RS-232C
	Display	5.7 inch color liquid crystal display
	Dimension	306(W) × 493(D) × 463(H)mm
	Weight	18kg
Power	Voltage	AC100V to 240V
	Frequency	50/60Hz
	Consumption power	85VA to 110VA

### **TN-100 NON-CONTACT TONOMETER**

Frey Non-contact tonometer TN-100 is a modern diagnostic device, featuring fast accurate examinations, ensuring optimal levels of patient comfort undergoing non-invasive measurement of intraocular pressure. TN-100 measurement is fully automated, saving time for user ans patient



#### Auto alignment and auto shot

TN-100 is easy and intuitive to use, including inexperienced users. Alignment and measurement are automated, with simple hand adjustment of the joystick towards the patient's eye to commence automatic examination.

#### Cornea thickness corrected IOP

Users can easily adjust the measured IOP data by the value of the central corneal thickniss. TN-100 has preprogrammed formulas for IOP correction. If central corneal thickness is entered before examination, the device will display coreected IOP values.

#### SD card

SD Card can be used to backup patient results and to transfer the data to PC computer. Installation version of PC application for patient records mangament is delivered on SD card supplied with TN-100

#### **Embedded patient database**

Patient data storage capability and measurements values for 4000 patient data base included. Patient examiniation record and database is available immediately upon completion of examination. Individual patient examination or entire patient history can printed with simple one touch. Internal printer simplifies record keeping.

#### Touch screen interface

Easy to use, intuitive operation of TN-100 features a 7" color LCD capative touch screen. User interface software is optimized for each function, clearly displaying all measurement dta guiding yie User through the measurement process from the alignment of the eye, to the display of the reaings. TN-100 menus and device options are easily accessed and simple to navigate.

#### **TECHNICAL SPECIFICATIONS**

HARDWARE SPECIFICATION		
Field of view	45°	
Field of view with mosaic function	90°	
Retinal resolution	14 microns	
Fixations	7 fixations set-ups	
Tablet dimensions	10.4"	
Weight	32,4 lbs	
Size	13,4 x 16,9 x 18,1 in.	

#### SOFTWARE SPECIFICATION

Image filters (vascular, choroidal, nerve fibre, red free)

Cup-to-disc ratio for glaucoma screening

Automatic mosaic function

Shared intranet folder

DICOM standard compatible

Fundus adapter to transfer images to a local pc

#### DATA MANAGEMENT

Full Al integration (option)

Cloud-based secure storage

Client-side data encryption

Automatic database backup

Review images from the password protected website,
a network shared folder or a local PC

Multilevel account

Access by personal user



# **SW-500 HANDHELD REBOUND TONOMETER**

SUOER rebound Tonometer SW-500 is used to measure intraocular pressure. There are two working modes: vertical and horizontal. When the probe contacts the surface of cornea, depending on hardness at a certain speed, it has a different reaction of the probe rebounding.

Advantage: high accuracy, portable, without anesthesia, without cross-infection etc. Wireless data output.



### **TECHNICAL DATA**

Measure Range	3mmHg" 70mmHg
Precision	±1.5mmHg (3mmHg≤IOP≤25mmHg);
Measurment Mode	±2.5mmHg (25mmHg <iop≤70mmhg);< td=""></iop≤70mmhg);<>
Output	Bath vertical and horizontal measurment
Easy to use	Wireless Infrared Thermal Printer
Small size, Easy to carry	
No need Anesthesia, No Discomfortableness	

SW-500 HANDHELD REBOUND TONOMETER

SUOEL



# **SW-5000 NON-CONTACT TONOMETER**

SUOER IOPro (SW-5000) using an air puff, an optical non-contact method, to measure intraocular pressure. The advantage includes auto-focusing, fast measurement speed, comfortable measurement process, and no cross-infection.

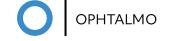
### **Unique Features**

- Integrated ORA (Ocular Response Analyzer)
- Unique collection of waveform confidence interval data by weight average of three readings, and indicate low confidence interval results
- Manually focus by touching screen
- Non-contact measurements to avoid cross infection
- Integrated 24 hours IOP trend analysis system



### **TECHNICAL DATA**

Measuring Range	1 mmHg~60mmHg
Measuring Scale	30mmHg, 60mmHg
Measuring Accuracy	1mmHg;
Measuring Distance	11mm
Focus Method	focus points + focus notification
Focus Mode	three-dimensional auto-focus/ma- nual focus/touch screen focus
nterior Light Fixation	Green LED
Stroke of Moving Track	Left-Right: 80mm Forward-Backward: 40mm Up-Down: 20mm
Display	large colored LCD screen
Output	high speed thermal printer
	-





# **VX120+ ANTERIOR SCREENING**

Unique diagnostic device for the anterior chamber, screening and analysis of the vision. Make the difference thanks to the VX120+, complete and fully automatic diagnostic screening device. Complete refraction, differentiate between day and night vision needs, glaucoma, cataract, keratoconus identification and monitoring, fitting of contact lenses.



Height	570 mm
Width	312 mm
Depth	530 mm
Weight	25 kg
Voltage	100-240 VAC, 50/60 Hz, 300 W

VX120+ ANTERIOR SCREENING

Luneau Technology

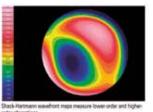
### **Complete Refraction**

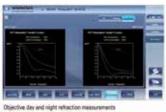
### Differentiate Between Day And Night Vision needs

- Objective day and night refraction measurements
- 1300 points points analyzed for a 7-mm diameter pupil
- Objective refraction under mesopic and photopic conditions
- Measures lower-order and higher-order aberrations
- Access visual acuity and quality of vision on a pupil as small as 1.2 mm
- MTF curve

### Technology

Shack-Hartmann wavefront analysis







### Glaucoma

### Identification and monitoring

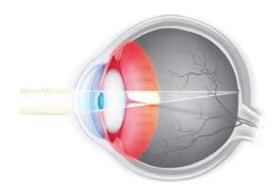
- Anterior chamber analysis
- · Automatic measurement of iridocorneal angles
- · Measurement of anterior chamber volume
- Measurement of anterior chamber depth
- Measurement of IOP (intraocular pressure)
- Measurement of corneal thickness
- Corrected IOP as a function of corneal thickness

### Technology

Scheimpflug imaging and non contact tonometer with soft









Keratoconus

### Identification and monitoring

### Topography maps

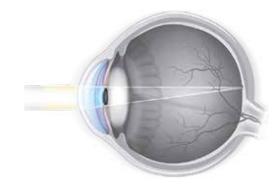
- Axial, tangential elevation and refraction maps
- Keratoconus probability index (KPI)
- · Keratoconus monitoring
- · Internal astigmatism measurement
- Eccentricity and meridian tables
- Corneal aberrometry

### Technology

Wavefront analysis with Shack-Hartmann technology, Placido rings, Scheimpflug imaging











VX120+ ANTERIOR SCREENING

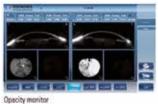
Luneau Technology

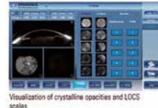
### Identification of a cataract

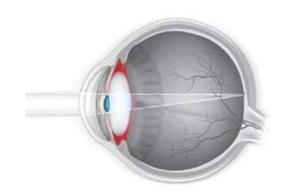
- Visualization of crystalline opacities
- Analysis of wavefront aberrations, with the ability to separate corneal and lenticular/internal aberrations
- Internal astigmatism measurement
- Kappa angle for IOL centering
- Z.4.0 value for aspheric implant
- Lens opacity classification (LOCS II and III scales)

### Technology

Scheimpflug imaging , Retroillumination, Shack-Hartmann, Placido rings









### VX120+ Ready for communication

The VX 120 + can be set up in a network to integrate with your patient management software and provide a variety of communication options to optimize your work flow.

- Review results from any supported device (tablet, smartphone, etc.)
- · Print directly from your local or network printer
- Customize your reports
- Synchronize data, graphs, and maps for any examination
- Communication enabled with other instruments

### **TECHNICAL SPECIFICATIONS**

GENERAL	
Alignment	XYZ automatic
Display	10.1" (1 024 x 600) TFT screen Multi-touch screen
Observation area	ø 14 mm
Medical device directive	EC MDD 93/42/EC modified by directive 2007/47/EC
Output	RS232/USB/VGA/LAN

### POWER MAPPING AND REFRACTION

Spherical power range	-20D to +20D
Cylinder power range	0D to + 8D
Axis	0 to 180°
Measuring area	Min. ø 2 mm - Max. 7 mm (3 zones)
Number of measuring points	1,300 points
Acquisition time	0.2 sec
Method	Shack-Hartmann

## PACHYMETRY, IC (IRIDOCORNEAL) ANGLE AND PUPILLOMETRY

Method	Continuous vertical scan with the Scheimpflug camera
Pachymeter measuring range	150-1300 μm
Pachymeter resolution	+/- 10 microns
IC angle measuring range	0°-60°
IC resolution	0.1°
Pupil illumination	Blue light 455 nm

# RETROILLUMINATION CORNEAL TOPOGRAPHY BY SPECULAR REFLECTION

Number of rings	24
Number of measuring points	6,144
Number of points analyzed	More than 100,000
Diameter of covered corneal area at 43D	From 0.75 mm to more than 10 mm
Measurement range	From 37.5 D to 56 D
Repeatability	0.02 D
Method	Placido rings

### TONOMETER

Measurement range	7 mmHg to 44 mmHg
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# **VX130+ ANTERIOR SCREENING**

Succeed in all your diagnostics. Glaucoma and keratoconus detection, identification of patients for cataract surgery with premium and/or toric implants, identification of patients for refractive surgery. The VX130+ combines state-of-the-art technologies and provides essential data for optimal patient eye care. The VX130 is the ideal patient monitoring system.



Height	570 mm
Width	312 mm
Depth	530 mm
Weight	25 kg
Voltage	100-240 VAC, 50/60 Hz, 300 W
	-

VX130+ ANTERIOR SCREENING

Luneau Technology

### Glaucoma

### Identification and monitoring

- Anterior chamber analysis
- Automatic measurement of iridocorneal angles
- Measurement of anterior chamber volume
- Measurement of anterior chamber depth
- Measurement of IOP (intraocular pressure)
- Measurement of corneal thickness
- Corrected IOP as a function of corneal thickness



Anterior chamber analysis



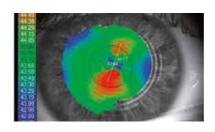
Corrected IOP as a function of corneal thickness

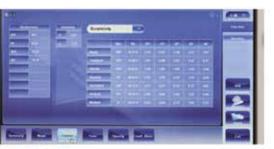
### Keratoconus

### Identification and monitoring

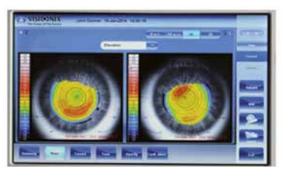
Topography maps

- Axial, tangential elevation and refraction maps
- Keratoconus probability index (KPI)
- Keratoconus monitoring
- · Internal astigmatism measurement
- · Eccentricity and meridian tables
- · Corneal aberrometry
- Measurement of total refractive power of the eye including anterior and posterior surface of the cornea
- Visualization of the anterior and posterior aspect of the corner.
- Anterior / posterior elevation map of the cornea





Eccentricity table



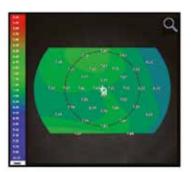
### Identification of patients for cataract surgery

Topography of the anterior and posterior surfaces of the cornea

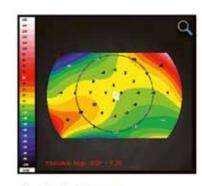
Complete analysis of the cornea

- Corneal thickness map
- Elevation maps
- Anterior and posterior axial, tangential, 3D maps
- · Anterior and posterior keratometry, eccentricity
- Kappa angle

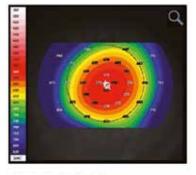
Combination of Scheimpflug imaging and corneal topography technologies used to generate thickness and elevation maps over a large corneal surface.



Axial elevation map



Posterior elevation map



Total refraction elevation map



### Luneau Technology

VX130+ ANTERIOR SCREENING

### **PRE-OP** cataract surgery

- Visualization of crystalline opacities
- · Analysis of wavefront aberrations, with the ability to separate corneal and lenticular/internal aberrations
- Internal astigmatism measurement
- Kappa angle for IOL centering
- Z.4.0 value for aspheric implant
- Lens opacity classification (LOCS II and III scales)
- Premium IOL candidate identification and monitoring

Aspheric or Spheric IOL

Multifocal

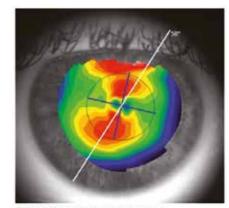
Toric

Multifocal toric



### **POST-OP** cataract surgery

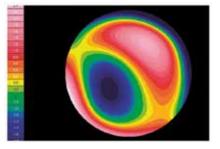
- Post-operative IOL check
- Toric lens implant axis alignment check
- Analysis of post-op output to improve surgery protocols
- Analysis of the total correction including the IOL



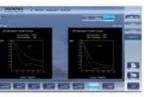
Toric lens implant axis alignment check

### Vx130+ Complete refraction Differentiate between day and night vision needs

- Objective day and night refraction measurements
- 1300 points points analyzed for a 7-mm diameter pupil
- Objective refraction under mesopic and photopic conditi-
- Measures lower-order and higher-order aberrations
- Access visual acuity and quality of vision on a pupil as small as 1.2 mm
- MTF curve







### **TECHNICAL SPECIFICATIONS**

XYZ automatic
10.1" (1 024 x 600) TFT screen Multi-touch screen
ø 14 mm
EC MDD 93/42/EC modified by directive 2007/47/EC
RS232/USB/VGA/LAN

### POWER MAPPING AND REFRACTION

Spherical power range	-20D to +20D
Cylinder power range	0D to + 8D
Axis	0 to 180°
Measuring area	Min. ø 2 mm - Max. 7 mm (3 zones)
Number of measuring points	1,300 points
Acquisition time	0.2 sec
Method	Shack-Hartmann

### PACHYMETRY, IC (IRIDOCORNEAL) ANGLE AND PUPILLOMETRY

Method	Continuous vertical scan with the Scheimpflug camera
Pachymeter measuring range	150-1300 μm
Pachymeter resolution	+/- 10 microns
IC angle measuring range	0°-60°
IC resolution	0.1°
Pupil illumination	Blue light 455 nm

### RETROILLUMINATION CORNEAL TOPOGRAPHY BY SPECULAR REFLECTION

Number of rings	24
Number of measuring points	6,144
Number of points analyzed	More than 100,000
Diameter of covered corneal area at 43D	From 0.75 mm to more than 10 mm
Measurement range	From 37.5 D to 56 D
Repeatability	0.02 D
Method	Placido rings

### **TONOMETER**

Measurement range	7 mmHg to 44 mmHg
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# **VX210 SCHEIMPFLUG CAMERA**

Scheimpflug Camera and Placido disc. High precision instrument for the tomography of the anterior ocular segment and cornea analysis. The excellent combination between a rotating Scheimpflug camera and a Placido disk provides a complete analysis of both the entire cornea and the anterior segment.

### **FEATURES AND BENEFITS**

An extremely fast guided acquisition system

- Diagnosis
- Pre and post cataract and refractive surgery
- Corneal and anterior segment Scheimpflug image analysis
- · Tangential and axial curvature for the anterior and posterior corneal surface
- Anterior refractive power, posterior refractive power and equivalent power of the whole cornea
- Altimetric maps referred to various surfaces
- Corneal thickness map and anterior chamber depth map
- · Corneal wavefront and visual quality analysis
- Contact lens fitting module
- Extremely fast alignment, acquisition, and processing (less
- · Retro-illumination image for densitometry

### **TECHNICAL SPECIFICATIONS**

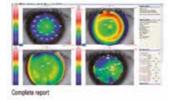
Camera	Double head CCD	
Light source	LED Blue (475 nm - UV free)	
Working distance	80mm	
Rings	22	
Measured points	21632 for anterior surface, 16000 for the posterior	
Processed points	more than 100.000	
Covered cornea diameter	0,4 up to 12 mm diameter	
Diopters range	1 to 100 D	
Accuracy	± 0.25 D (half scale)	

Height	510 mm (20.08 in)	
Width	250 mm (9.84 in)	
Depth	320 mm (12.60 in)	
Weight	7 kg (15.43 lbs)	
Electric power supply	(only instrument) external power supply	

VX210 SCHEIMPFLUG CAMERA

Luneau Technology



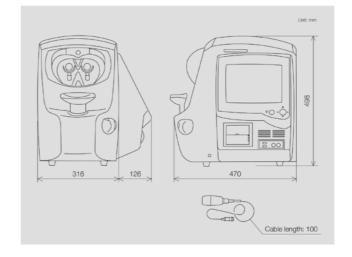


# **CGT-2000 GLARETESTER**

Advanced Performance from Pursuit of "Quality". The CGT-2000 detects even the subtle changes in visual function that would be missed by visual acuity tests. The CGT-1000, which had been well received by many practices and medical facilities including university hospitals, has evolved into an advanced model, the CGT-2000 incorporating various customers' feedback. The CGT-2000 is particularly useful and effective in pre-/post-cataract surgery diagnosis and follow-up observations subsequent to refractive surgery.



Test Distance	30cm, 60cm, 1m, 5m
Light Conditions (Luminance of Test Target Background)	Day, Twilight, Night, or Examiner Specified
Glare	Three settings: Low (L), Medium (M), and High (H)
Structure of Test Target	Multiple structure with dual concentric circles
Visual Angle of Test Target	6.3, 4, 2.5, 1.6, 1, 0.64 degrees
Contrast Value of Test Target	14 levels between 0.0071 and 0.64
Presentation Duration of Test Target	0.2, 0.4, 0.8, 1.6 seconds
Presentation Interval of Test Target	1, 2, 3 seconds
Power Supply	AC100 – 230V, 50/60Hz
Power Consumption	200VA
Fuse	5A
External Dimensions	498mm (H) x 442mm (W) x 470mm (D)
Weight	22kg









### 1. Binocular Testing Capability

While monocular testing provides assessment of each eye, it does not reflect how well patients actually see objects in everyday life. As the CGT-2000 can test patients with both eyes open, it provides assessment of their visual function close to real-world conditions.

CGT-2000 GLARETESTER

**77** Takacı



### 2. Variable Test Distance

Test distance can now be selected from the following four settings: 30cm, 60cm, 1m, or 5m, allowing measurement of contrast sensitivity at a near, intermediate or far point. This will provide detailed assessment of patient's 'quality of vision' for more precise diagnosis. This function is also useful in measuring contrast sensitivity in patients with multifocal intraocular lens.

# 3. Testing under Various Light Conditions (Luminance Levels of Test Target Background)

Testing can now be done under various light conditions: day, twilight, night, or examiner specified. This will provide assessment of patient's functional vision under conditions close to their everyday environment.



# Paper III Aper III Constant Const

### 4. Database Storage

By simply entering a patient ID and a date of birth (or age group), the patient's data will be stored in the device. Selected sets of data are instantly converted into graphs, contributing to ease of examination and diagnosis including for pre-/post-cataract surgery comparisons and post-refractive surgery follow-up observations.

### 5. Pupil Monitoring

Testing can now be performed as you monitor patient's pupils, which improves test quality, facilitating more precise diagnosis and examinations.



### 6. Customizing

Test items can be customized to suit each practice or hospital. This can be done with ease as once entered, the test setting will be stored in the instrument's internal memory; there is no need to repeat this procedure. Multiple test settings to suite a number of specific conditions and cases can be stored.



### 7. Simple Touch-screen Operation

The testing process, including start and end, can be performed by touching the 10.4" screen. On-screen buttons are arranged in a userintuitive way, facilitating ease of operation. The CGT-2000 is designed to deliver stress-free testing to the examiner.



### 8. Motorized Alignment

The chinrest and the interpupillary distance can be adjusted smoothly with the controls placed on the examiner's side of the instrument.



### 9. Easier Paper Loading

With the new "drop-in" paper loading system, all the examiner has to do is drop in a paper roll, and close the cover. No cumbersome paper feeding or threading through a slot is involved, reducing the examiner's burden.



### Testing

Testing how much contrast a patient can distinguish in objects of varying sizes (Contrast sensitivity testing)





Present test targets with lower contrast to those patients whose expected ability to distinguish contrast is high. On the other hand, present targets with higher contrast where patient's expected ability to distinguish contrast is low. Patient's responses are graphed, which provides sensitivity evaluation across the wide range of sizes and contrasts.

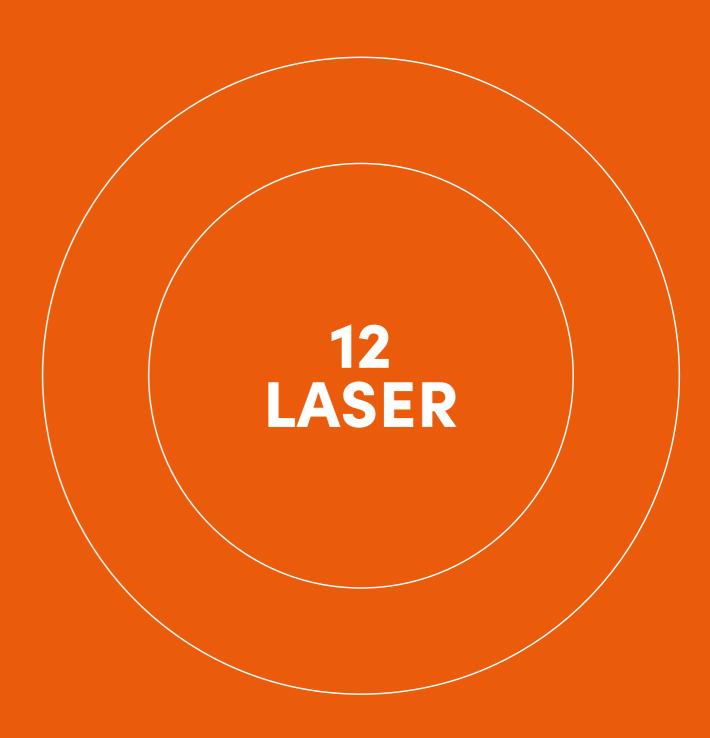






The degree of visual disturbance from glare can be assessed by using glare lamps during contrast sensitivity testing.





LIGHTMED



# **LIGHTLAS YAG**

### Laser photodisruptor and vitreolysis

- Solution For: Cataract, Glaucoma, Anterior Segment/Cornea, Vitreous Floaters
- Clinical Applications: Posterior Capsulotomy, Posterior Membranectomy, YAG Vitreolysis, YAG Laser Iridotomy, YAG Sweeping, YAG Corticolysis, YAG Anterior Stromal Puncture
- Treats: Secondary Cataract, Closed Angle Glaucoma, Corneal Erosion Syndrome





# **LIGHTLAS SLT**

### Selective Laser Trabeculoplasty

- Clinical Applications: Selective Laser Trabeculoplasty
- Treats: Open Angle Glaucoma

# **LIGHTLAS 532/577/810®**

### Laser Photocoagulators with SP-Mode®

- Solution For: Retina, Glaucoma Clinical Applications: Laser Photocoagulation, SP-Mode® Microsecond Laser Technology
- Treats: Diabetic Retinopathy, Pan-Retinal Photocoagulation, Retinal Tears, Holes & Detachment, Endo-Photocoagulation, Proliferative Diabetic Retinopathy, Diabetic Macular Edema, Sub-Retinal Neovascularization, Central Retinal Vein Occlusion, Branch Retinal Vein Occlusion, Central Serous Chorioretinopathy, Sub-Threshold Laser Trabeculoplasty,





# **LIGHTLAS TRUSCAN**

### Pattern Scanning Photocoagulator with SP-Mode®

- Solution For: Retina, Glaucoma
- Clinical Applications: Laser Photocoagulation, SP-Mode® Microsecond Laser Technology
- Treats: Diabetic Retinopathy, Pan-Retinal Photocoagulation, Retinal Tears, Holes & Detachment, Endo-Photocoagulation, Proliferative Diabetic Retinopathy, Diabetic Macular Edema, Sub-Retinal Neovascularization, Central Retinal Vein Occlusion, Branch Retinal Vein Occlusion, Central Serous Chorioretinopathy, Sub-Threshold Laser Trabeculoplasty, Retinopathy of Prematurity, Transscleral Cyclophotocoagulation





13 SLIT LAMPS

**Luneau** Technology



# **VISIONIX VX70**

With its modern optical design, the VX70 will cover all the needs of your practice. This slit lamp utilizes a multi-coated system which transmits light more efficiently, for a very good clarity. The LED light source is more economical, much better for the environment with a longer life time (100 x more than the halogen one) and provides a better uniform illumination. Available in 5 x, 3 x or 2 x magnifications.



### **FEATURES AND BENEFITS**

### Superior stereo microscope

- Convergent version
- The five primary magnifications give total magnification of 6x/43; 10x/27; 16x/16; 24x/11; 40x/7

### Adjustments

Luminosity adjustments by potentiometer and boost button on joystick.

### Accessories included

- Base plate
- Tonometer support plate
- 5 V Power supply

### **Built-in filters**

• Blue cobalt (fluorescence), green (red-free), grey (heat absorbing)

### **Options**

<ul> <li>Tonometer</li> </ul>	Ref. 8480-5010-0
<ul> <li>Individual table</li> </ul>	Ref. 7760018
• Table for 2 instruments (V-shaped)	Ref. 7760016
Sterile tonometer cones (100 units)	Ref 147124

Magnifications	2x/3x/5x
Parallel version	-
Convergent version	•
Height adjustment: manual version	
Height adjustment: motorized version	-
Slit width	0 - 14 mm Continually
Slit length	0 - 14 mm Continually
Slit apertures	14; 10; 6; 4; 3; 1; 0,2mm
Tyndall point	Ø 0,2mm
Slit rotation	± 90° Continually on TABO scheme
Working distance	100mm
Average viewing height	375mm
Light	LED
Max light intensity	300 000 Lux
Longitudinal (In/ Out)	99mm
Lateral (Left/Right)	118mm
Vertical (Up/Down)	30mm
Chin-rest height	76mm
Angle stéréo	6°
Eyepiece	10x
Total magnification/field of view (in mm) for 2 magnifications	10x/27; 16x/16
Total magnification/field of view (in mm) for 3 magnifications	10x/27; 16x/16; 25x/11
Total magnification/field of view (in mm) for 5 magnifications	6x/43; 10x/27; 16x/16; 24x/11;

Pupillary adjustement	40x/7	
Diopter ajustment	"52 - 90mm (2 magnifications) 55 -	
Blue (fluorescence)	75mm (3 or 5 magnifications)"	
Green (red-free)	+/- 6D	
Grey (anti heat)	•	
Yellow	•	
Power supply	•	
Power supply for the slit lamp	-	
Power supply for the fixation point	Provided	
Input voltage	3,4V, 700mA	
Fusible	5v	
Width	110V / 220V AC; 60/50Hz	
Depth	NA	
Height	380mm	
Weight	530mm	
MDD, CE	780mm	
Safety class	Packed: 26Kg (2 magnifications), 28Kg (3 or 5 magnifications)	
Parts applied	•	
Tonometer	1	
Tonometer support plate	туре В	
Compatibility with EyePix2	8480-5010-00	
Compatibility with EyePix3	Provided with the tonometer	



Luneau Technology



# **VISIONIX VX75**

The VX75 secures the operator with superior imaging thanks to reliable optics and light technology. On the basis of well-recognised illumination concepts the operating features and illumination are positioned on top of the microscope. Excellent optics and brilliant image distinguish the VX75.



### Eyepix 3

The system consists of a digital video camera and software for processing data. Eyepix allows you to document and visualize your process and / or results to dynamically display. The screen allows you to follow in real time your exam and so reassure your patient.

### FEATURES AND BENEFITS

### Slit projector

Recognised slit projector with operating elements on top of the microscope Variable slit lengths from 1 to 12 mm Vertical tilting system up to 20° in  $5^\circ$  steps

### **Exceptional Stereo microscope**

Choice of either three or five magnification levels With converging ocular system. High contrast and brilliant pictures due to MAR coated optical lenses

### Unique Stereo microscope

- Select up to five magnification levels via convenient magnification changer
- Adaptation to your visual habits by a variety of ocular tubes
- Experience unrestricted visual comfort even if you wear glasses by the five-focal optics of the eyepiece

### Ergonomic features for operating convenience

- · Convenient working distance
- Cross carriage with single-handed operation
- Slit adjustment, filter, scales and lock-in positions are within close range
- Suitable for right & left-handed users

### Built-in filters

• Blue cobalt (fluorescence), green (red-free), grey (heat absorbing) and yellow

### **Options**

-	
• Tonometer	Ref. 8475-8000-00
Tonometer Support	Ref. 8475-8002-00
• 12 V - Separate Power supply	Ref. 8475-8001-00
Individual table	Ref. 7760018
• Table for 2 instruments (V-shaped)	Ref. 7760016
• Eyepix 3	Ref. 8400-8023-00
• Sterile tonometer cones (100 units)	R <sub>≏</sub> f 147124

Magnifications	3x/5x
Parallel version	•
Convergent version	•
Height adjustment: manual version	•
Height adjustment: motorized version	-
Slit width	0 - 14 mm Continually
Slit length	1,8 - 13mm Continually
Slit apertures	14; 9; 5,5; 0,3mm
Tyndall point	Ø 0,3mm
Slit rotation	± 90° Continually on TABO scheme
Working distance	68mm
Average viewing height	375mm
Light	LED
Max light intensity	350 000 Lux
Longitudinal (In/ Out)	113mm
Lateral (Left/Right)	107 mm
Vertical (Up/Down)	30 mm
Chin-rest height	76 ±1mm
Angle stéréo	6°
Eyepiece	12,5x
Total magnification/field of view (in mm) for 2 magnifications	-
Total magnification/field of view (in mm) for 3 magnifications	10x/24; 16x/14; 25x/8mm
Total magnification/field of view (in mm) for 5 magnifications	6x/37; 10x/24; 16x/14; 25x/8; 40x/5,2mm

Pupillary adjustement	48,5 - 80mm
Diopter ajustment	+/- 6D
Blue (fluorescence)	•
Green (red-free)	•
Grey (anti heat)	•
Yellow	•
Power supply	8475-8001-00
Power supply for the slit lamp	~12V AC
Power supply for the fixation point	12V
Input voltage	100V/120V/230V/240V AC; 60/50Hz
Fusible	"100-120V CA 1A 230-240V CA 0,5A"
Width	296mm
Depth	313mm
Height	433±15mm
Weight	"Lamp: 7,4Kg Digital lamp: 8,1Kg"
MDD, CE	•
Safety class	1
Parts applied	Туре В
Tonometer	8475-8000-00
Tonometer support plate	8475-8002-00
Compatibility with EyePix2	-
Compatibility with EyePix3	•



**Luneau** Technology



# **VISIONIX VX80**

The VX80 slit lamp is equiped with efficient arranged operating controls for easy working. Slit width, height and rotation and filters are eas to adjust.



### **FEATURES AND BENEFITS**

### Reliable stereo microscope

- Choice of either three or five magnification levels
- · Adaptation to your visual requirements by either parallel or
- converging ocular system
- Easy implementation of discreet fluo filter changer

### **Unique Features**

- Standard base designed for single-handed operation
- · Variable illumination level with a built-in controller
- With one step you can monitor the horizontal shift and convenient height adjustment of the VX80

### Powerful slit projector

- · High illumination by leds with consistent luminance
- Sharp slit images from the front cornea surface to the rear
- Swivelling prism head

### **Built-in filters**

• Blue cobalt (fluorescence), green (red-free), grey (heat absorbing) and yellow

### **Options**

<ul> <li>Tonometer</li> </ul>	Ref. 8480-8000-00
<ul> <li>Tonometer Support</li> </ul>	Ref. 8475-8003-00
• 12 V - Separate Power Supply	Ref. 8475-8001-00
<ul> <li>Individual table</li> </ul>	Ref. 7760018
• Table for 2 instruments (V-Shaped)	Ref. 7760016
• Eyepix 3	Ref. 8400-8023-00
• Sterile tonometer cones (100 units)	Ref. 147124

### Eyepix 3

The system consists of a digital video camera and software for processing data. Eyepix allows you to document and visualize your process and / or results to dynamically display. The screen allows you to follow in real time your exam and so reassure your patient.

Magnifications	3x/5x
Parallel version	•
Convergent version	•
Height adjustment: manual version	
Height adjustment: motorized version	-
Slit width	0 - 14 mm Continually
Slit length	1 - 12mm Continually
Slit apertures	12; 9; 5; 3; 1; 0,2mm
Tyndall point	Ø 0,2mm
Slit rotation	± 90° Continually on TABO scheme
Working distance	88mm
Average viewing height	375mm
Light	LED
Max light intensity	350 000 Lux
Longitudinal (In/ Out)	113 mm
Lateral (Left/Right)	107 mm
Vertical (Up/Down)	30 mm
Chin-rest height	66 ±1mm
Angle stéréo	6°
Eyepiece	12,5x
Total magnification/field of view (in mm) for 2 magnifications	-
Total magnification/field of view (in mm) for 3 magnifications	10x/24; 16x/14; 25x/8mm

Total magnification/field of view (in mm) for 5 magnifications	6x/37; 10x/24; 16x/14; 25x/8; 40x/5,2mm
Pupillary adjustement	48,5 - 80mm
Diopter ajustment	+/- 6D
Blue (fluorescence)	•
Green (red-free)	•
Grey (anti heat)	•
Yellow	•
Power supply	8475-8001-00
Power supply for the slit lamp	~12V CA;
Power supply for the fixation point	12V
Input voltage	110V / 220V AC; 60/50Hz
Fusible	"100-120V CA 1A 230-240V CA 0,5A"
Width	299mm
Depth	313mm
Height	644±15mm
Weight	"Lamp: 8,7Kg Digital lamp: 9,4Kg"
MDD, CE	•
Safety class	1
Parts applied	Туре В
Tonometer	8480-8000-00
Tonometer support plate	8480-8003-00
Compatibility with EyePix2	-
Compatibility with EyePix3	•



**Luneau** Technology



# **VISIONIX VX85**

The VX85 slit lamp is characterised by a closed bearing base, which makes precise and easy positioning in front of the eye. The base also integrates the power cable making the unit appears cordless. Light intensity is supplied via an electronic lamp regulator located in the unit base.



### FEATURES AND BENEFITS

### Superior stereo microscope

- Choice of either three or five magnification levels
- Adaptation to your visual requirements by either parallel or converging ocular system
- Easy implementation of discreet fluo filter

### **Unique Features**

- Closed joystick base guarantees user friendly adjustments
- Ball bearing base on ground tracks guarantee an extremely smooth run of the slit lamp and makes a fast and precise positioning.

### Fast slit projector

- High illumination by LEDS with consistent luminance
- Continuous Variable slit lengths 1.5 11 mm
- Sharp slit images from the front cornea surface to the rear lens surface
- Swivelling prism head

### **Built-in filters**

• Blue cobalt (fluorescence), green (red-free), grey (heat absorbing) and yellow

### **Options**

<ul> <li>Tonometer</li> </ul>	Ref. 8475-8000-00
<ul> <li>Tonometer Support</li> </ul>	Ref. 8475-8002-00
• 12 V- Separate power supply	Ref. 8485-8001-00
<ul> <li>Individual table</li> </ul>	Ref. 7760018
• Table for 2 instruments (V-shaped)	Ref. 7760016
• Eyepix 3	Ref. 8400-8023-00
• Sterile tonometer cones (100 units)	Ref. 147124

### Eyepix 3

The system consists of a digital video camera and software for processing data. Eyepix allows you to document and visualize your process and / or results to dynamically display. The screen allows you to follow in real time your exam and so reassure your patient.

Magnifications	3x/5x
Parallel version	•
Convergent version	•
Height adjustment: manual version	•
Height adjustment: motorized version	•
Slit width	0 - 12mm Continually
Slit length	1,5 - 11mm Continually
Slit apertures	12; 8; 5; 0,2mm
Tyndall point	Ø 0,2mm
Slit rotation	± 90° Continually on TABO scheme
Working distance	68 mm
Average viewing height	375mm
Light	LED
Max light intensity	350 000 Lux
Longitudinal (In/ Out)	113 mm
Lateral (Left/Right)	100mm
Vertical (Up/Down)	30mm
Chin-rest height	70mm
Angle stéréo	6°
Eyepiece	12,5x
Total magnification/field of view (in mm) for 2 magnifications	-
Total magnification/field of view (in mm) for 3 magnifications	NA
Total magnification/field of view (in mm) for 5 magnifications	5x/44; 8x/26; 14x/15; 24x/9; 36x/6mm

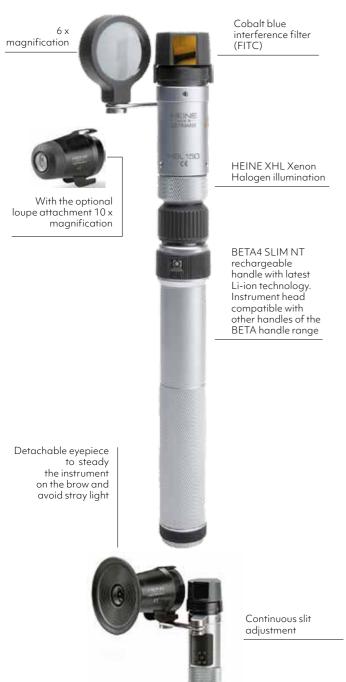
Pupillary adjustement	48,5 - 80mm
Diopter ajustment	+/- 6D
Blue (fluorescence)	•
Green (red-free)	•
Grey (anti heat)	•
Yellow	•
Power supply	8485-8001-00
Power supply for the slit lamp	12V AC
Power supply for the fixation point	12V
nput voltage	110V / 220V AC; 60/50Hz
Fusible	1,2A
Width	240mm
Depth	300mm
Height	440mm
Weight	12,0Kg Instrument (excluding accessories; Headrest: 1,5Kg)
MDD, CE	•
Safety class	1
Parts applied	Туре В
Tonometer	8475-8000-00
Tonometer support plate	8475-8002-00
Compatibility with EyePix2	-
Compatibility with EyePix3	•



HEINE GUALITY

# **HSL 150 HAND-HELD SLIT LAMP**

The ideal portable solution for the examination of the anterior segment. Light, mobile and easy to use.



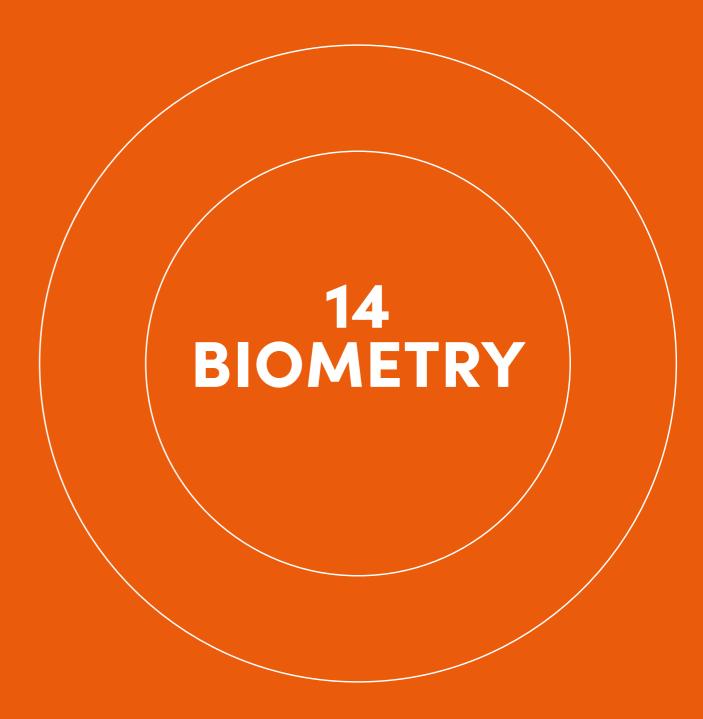
### THE HSL 150 FEATURES BRIGHT, WHITE XHL XENON

**HALOGENILLUMINATION** comparable in intensity with the best static slit lamps for examination of the anterior segment. The compact, ergonomic design provides instant loupe alignment of the slit image for comfortable operation. The HSL 150 provides a  $10 \times 0.2$  mm up to  $14 \times 4$  mm slit image for direct focal illumination with an optical section.

The ideal alternative for examinations where a static slit lamp is not available or practical to use. This hand-held slit lamp is invaluable for screening, in accident and emergency rooms, and for bed-ridden patients or small children.







# **SW-9000 OPTICAL BIOMETER**

The SW 9000 is an optical biometer that can accurately measure the length of the optical axis and perform intraocular (IOL) calculations.

Its operation is based on the combination of an ultrabright laser, 820nm wavelength, with Optical Low-Coherence Reflectometry (OLCR) technology, allowing eight measurements to be taken with one scan. It provides high accuracy and fast measurement without contact. It is convenient, does not require anesthesia in the eye and can not cause any infection or injury to the iris or pupil.

The calculation method of the intraocular lens (IOL) provides accuracy in micrometers in the following parameters:

- Eye's Axial length
- Central cornea thickness
- Anterior chamber depth
- Lens thickness
- Keratometry
- White to white distance
- Pupil Diameter
- Technical data fiche zie brochure





### **TECHNICAL DATA**

MEASUREMENT RANGE	
Axial length	12 - 34 mm
Central corneal thickness	300 - 800 μm
Corneal radii	4.8 - 11.1 mm
Axis angle	0° - 180°
Anterior chamber depth	1.5 - 6.0 mm
Lens thickness	0.5 - 7.0 mm
White-to-white	6.5 - 16.6 mm
Pupil diameter	1.9 - 13.5 mm

### **RESOLUTION**

Axial length	0.01 mm
Central corneal thickness	1 μm
Corneal radii	0.01 mm
Axis angle	1°
Anterior chamber depth	0.01 mm
Lens thickness	0.01 mm
White-to-white	0.01 mm
Pupil diameter	0.01 mm

### SD OF REPEATABILITY

Axial length	±25 μm
Central corneal thickness	±2 μm
Corneal radii	±10 µm
Axis angle	±9°
Anterior chamber depth	±20 μm
Lens thickness	±50 μm
White-to-white	±0.3 mm
Pupil diameter	±0.3 mm

### **IOL CALCULATION FORMULAS**

BinkHorst-II, Holladay, Hoffer-Q, Haigis, SRK-T, SRK-II

# CALCULATION FOR EYES FOLLOWING REFRACTIVE SURGERY

Shammas-PL, Masket, Modified Masket



# **SW-21 SCANNER A-B-UBM**

The SW-21 DELTA SCAN is a modular, innovative and high quality ultrasound instrument. You can choose any kind of ultrasound option combination for the unit and always add more at anytime.



### **BSCAN**

Frequency	10MHz, Magnetic driven, noiseless
Scanning Mode	Sector Scanning
Magnify	Multi continuous magnification, Real-Time magnification
Resolution	Laterals≤0.3mm Vericals≤0.2mm
Geometry position precision	Laterals≤5% Verticals≤3%
Depth	60mm
Enhance the part of v	itreous body and retina
Gain of Probe	30dB-105dB
Scanning Angle	53°
Gray Scale	256
False Color	Multi colors
Measurement Type	multigroup distances, perimeters and areas
Image Postprocessing	multiple curves processing, Pseudocolor processing curve
Movies	100 images movie, AVI JPG format image output



### A SCAN

10MHz, with LED 40mm ±0.05mm
±0.05mm
Anterior chamber depth, lens thick- ness, vitreous body lenght, total lenght and average
Phakic/ Aphakic/Dense/ Various IOL
SRK-II, SRK-T,HOFFER-O, HOL- LADAY, BINKHORST-II, HAIGIS
Average and standard deviation
10 Scanning results tor each eye

### **OTHERS**

Display Mode	B,B+B,B+A,A
Hint	Preset keyword
Case Search	Multi-keywords
Working Platform Windows Sysrem	
Useridefined report template	

### **FULL SCALE UBM**

I OLL SCALL OBIT	
Frequency	50MHz
Scanning Mode	Wide Range Sector, Scanning Mode, Undistorted, Sulcus-to-sulcus
Scanning Range	16mm*9mm; 10*6.5mm
Vertical Precision	≤40µm
Lateral Precision	≤40µm
Scanning Lines	1024Lines, 15µm between each lines
Geometry	Vertical ≤3%
Location	Lateral ≤3%
Precision	Non data interpolation, None distortion Imaging
Display Mode	UBM,UBM+A
System Performance	it have a special independent 50µm ultrasonic amplification system make the anterior segment image clearer
Working Platform	Windows Sysrem



# **HAND-HELD DIRECT** BETA 200 / BETA 200S (LED)

For a clear, bright, glare-free image of the fundus – for years to come.



Reduction of reflections thanks to the "Aspherical Optical System" (AOS) \*exclusively from Optical components are mounted on a cast aluminum frame

for precise illumination and true colour images during funduscopic examinations

Patented, unique, stepless dimming

XHL or LEDHQ illumination

Exclusive dustproof design protects the precision optical components and ensures maintenance-free operation. The BETA 200 / 200S Ophthalmoscopes are the only instruments with an aluminium frame system. Optical components are flush-mounted on a cast aluminum frame, eliminating misalignment and making the instrument shock-resistant. The BETA 200S LED has virtually unlimited hours of working life. No need to ever replace bulbs. Maintenance-free for a lifetime.

HAND-HELD DIRECT BETA 200/BETA 200S (LED)

The BETA 200S Ophthalmoscope accommodates higher refractive errors with a 28 single lenses Rekoss Disc and features a 74 single step design on a non-continuous wheel avoiding extreme diopter jumps (-36D to +38D). Patented, unique, stepless dimming from 3 % to 100 % with practical one-finger operation.

No stray light due to the recessed, multi-coated viewing window - eliminates distractions.

Precise one-hand control of the instrument. Ergonomic design offers flexibility while examining.

Suitable for large as well as small or undilated pupils.

Ergonomic design fits the orbita comfortably, and blocks out ambient light.

- · Aspherical optical system
- · Aluminium frame system
- · Eliminates corneal reflex
- · Ideal for small pupils
- · LED in HEINE Quality



EN 200 Diagnostic Centre: Instruments located at your fingertips in a space-saving design

# **HAND-HELD DIRECT MINI 3000**

Compact Pocket Ophthalmoscope with best colour rendering at minimal dimensions.



Compact Pocket Ophthalmoscope with maintanance free LED illumination. LED Thermal management for a consistent light output throughout the whole working life. Highperformance-LED: bright and absolutely homogeneous illumination with an excellent colour rendering.

Exclusive Battery Performance Indicator: When the instrument is switched on, the maximum light intensity is shown, then the light intensity is regulated down to the level that corresponds to the current charge status of the battery so you know when your batteries need changing. Exclusive fade-out function reduces illumination intensity with battery level to let you know when to replace.

- Optimal colour rendering
- Up to 10 hours operation time
- · LED in HEINE Quality
- Maintenance-free, no need to ever replace the LED.



of the instrument for more flexibility during examinations

> Two power supply options: replaceable AA batteries or rechargeable option mini NT table charger.





BETA4 rechargeable

handle with latest Li-ion technology

# HAND-HELD INDIRECT

Compact monocular ophthalmoscope. An unusually compact instrument, which is recommended for visits and mobile use.

- Coated optical glass provides a clear and
- Optionally integrated interference red-free filter for increased contrast

sharp image, even with a

high level of illuminance

- One-hand operation: All control elements can be reached with the thumb
- HEINE XHL Xenon Halogen illumination

Continuous brightness control



Adjustable illumination beam, for the examination of small pupils

- Durable metal construction. Long working life.
- Built-in interference red-free filter. Improves contrast.
- · All optical components made of coated optical glass. Precise images and high light intensity.

HAND-HELD INDIRECT

HEINE QUALITY

- · Adjustable light beam. Useful for small pupils.
- One hand operation. All control elements can be easily reached with the thumb.
- + 3 D lens attachment. An aid to accomodation, magnifies
- · Add-on binocular attachment available. Instrument can be up-dated for binocular use.



BETA4 rechargeable handle with latest Li-ion technology



HEINE A.R. Aspheric Ophthalmoscopy Lens The ophthalmoscopy lens which is needed for the examination provides a 3 – 5 x magnification of the fundus. 16 D / Ø 54 mm, 20 D / Ø 50 mm and 30 D / Ø 46 mm.



**HEINE Hand-held Indirect** Binocular Ophthalmoscope Adding the binocular attachment to the hand-held indirect ophthalmoscope allows stereoscopic examination. PD selection from 54 to 74 mm

## **OMEGA 600 INDIRECT**

Discover more with less weight. The new HEINE OMEGA 600 Indirect Ophthalmoscope



### YOU CAN ONLY DIAGNOSE WHAT YOU SEE.

### Most precise diagnostic, up to the far retinal periphery

- Significantly better diagnostic due to unique visionBOOST – even in dense cataracts
- Sharpest fundus image due to superior glass optics
- · Brightest fundus image with true colour rendering thanks to our unique LEDHQ – now in even more natural colors
- · Best 3D imaging due to our unique Stereoscopic Adjustment Technology
- in dilated and undilated pupils
- even with prematures and newborns

### HIGH TECH. LOW WEIGHT.

There is so much to discover inside the eye. And often tiny details can make a big difference. That's why we provide you with the best optics, the sharpest image, and reliable colors. Along with the capability to explore the whole retina, including the far periphery. This way, the optimal care or treatment for the patient can be decided, based on a diagnosis that is as accurate as possible. This is why we've developed the HEINE OMEGA 600, based on valuable physicians' input.

### New: visionBOOST for cataract patients:

more confidence in the diagnosis when examining patients with media opacities. Proven to deliver up to 20 % better view of the retina in patients with cataracts\*: no matter what circumstances – always the ideal working brightness for both the patient and the user.

And there is even more: The new HEINE OMEGA 600 is the lightest high-end indirect ophthalmoscope. The new, extremely compact lithium polymer battery is a true lightweight that delivers absolutely top performance. With all cables and electronics integrated in the new headband, this ophthalmoscope is the state of the art. So discovering more has been made even more comfortable.

Try the new HEINE OMEGA 600 for yourself. But be careful: once you put it on, you will never want to take it off ...

### LESS IS MORE: LESS CABLING. LESS FIDDLING. LESS WEIGHT.

Lightest high-end indirect ophthalmoscope worldwide

- Best wearing comfort
- · Personalized fit
- Ergonomic positioning of controls, switches and knobs
- Adaptable for right and left handed users
- Flip-up function for more convenient patient interactions



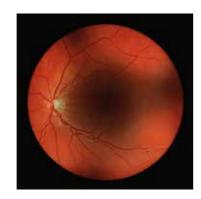


Thanks to the stereoscopic adjustment technology

### SEE WHEN YOU CAN'T SEE.

Up to now, when the front of the eye was clouded by media opacities, such as a cataract, the retina could not be viewed with an indirect ophthalmoscope, or only to a limited extent.

The new and unique visionBOOST improves the view of the patient's retina up to 20 %.

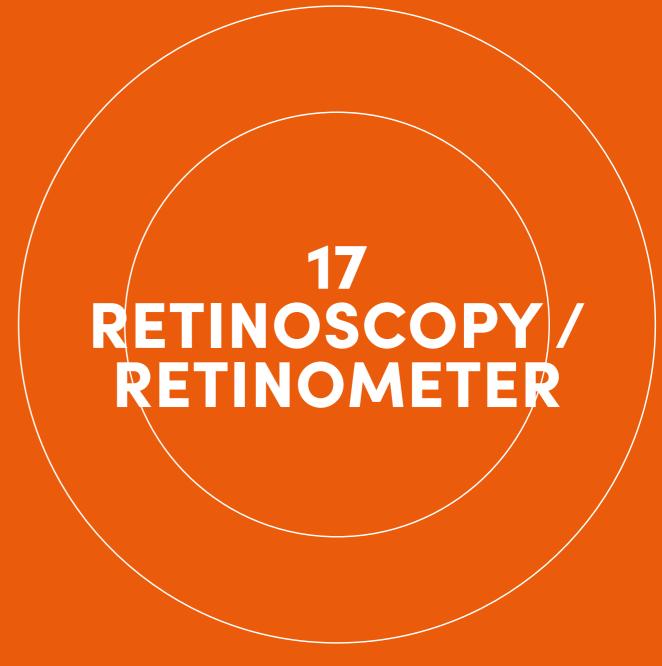


Common view of a retina through a cataract\*



View of a retina through a cataract with visionBOOST\*





# **HEINE BETA 200 RETINOSCOPE**

For a fast, reliable and objective determination of refractive error. For easy and quick observation of the fundus reflex ParaStop. Precise, easy selection of a parallel beam.

- ParaStop
- Highly visible, bright fundus reflex
- Metal controls

Polarisation filter: Eliminates stray light and internal reflexes

Enclosed vergence sleeve prevents drift during examinations



### LIGHT THAT SHOWS COLOURS AS THEY ARE

- · Bright and homogeneous illumination
- · Accurate colour rendering index
- Consistent light output and performance throughout the whole working life

BETA 200 RETINOSCOPE

HEINE QUALITY

• Efficiency with the BETA4 rechargeable handle a longer examination time of approx.  $3 \times$ 

### For a very bright, readily visible fundus reflex:

Brilliant, precise LED streak image. Completely homogeneous and bright light for a precise, fast diagnosis. Adjustable feel-good lighting for the patient: patented, unique, stepless dimming from 3 % to 100 % with practical one-finger opera-

### **HEINE ParaStop**

The BETA 200 Retinoscope with ParaStop features the latest multi-coated optics for an exceptionally bright fundus reflex and easier detection of the neutralisation point. ParaStop was developed by HEINE for the easy, precise selection of a parallel illumination beam.

ParaStop simplifies and speeds up the precise detection of cylinder axis. ParaStop also simplifies the verification of the cylinder correction after refraction.



# **HEINE LAMBDA 100 RETINOMETER**

The easy way of determining potential visual acuity after cataract surgery – proven by studies\*. The LAMBDA 100 Retinometer is the first compact instrument for assessing potential visual acuity of patients with cataracts and other opacities.

- XHL Xenon Halogen Technology and brightness control
- Simple, easy-to-use controls
- Compact, lightweight (100g)
- Clinically tested

## \* SUMMARY OF STUDIES:

- · Even in patients with opacities, relatively accurate prediction of potential visual acuity (especially in cases of moderate cataracts).3-5
- Retrospective analysis: In 94.5 % of cases the achieved postoperative visual acuity was equal to or higher than the one earlier determined with the retinometer.5
- · Helpful in planning surgery, especially on patients also suffering from another condition that affects their sight, which is the case for just under a third of all cataract patients. 1, 5 Determines whether a combined operation is necessary or whether cataract surgery alone is sufficient.
- · Useful in managing expectations, which is particularly important when dealing with patients with an ocular comorbidity where there is limited probability of improved visual acuity after surgery.5
- Rapid examination, taking less than 2 minutes, and easy to

The HEINE LAMBDA 100 Retinometer helps you explain the situation to your patients – improving the trust between doctor and patient.









# 18 EXAMINATION UNITS

# **VISIONIX VX1200**

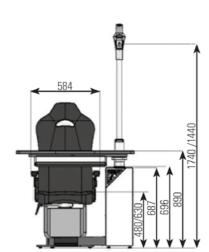
### 2 INSTRUMENTS UNIT WITH SLIDING TABLE

Compact and complete refraction unit, the VX1200 allows the eye care professionals to realize a refraction in a minimum of time and makes the set of necessary instruments available for their practice thanks to its sliding table.



### **GENERAL DATA**

1000 x 1188 mm
1000 x 1706 mm
250 kg
2 x 25 kg
520 to 680 mm
860 mm
230 Vac 50 Hz (230 Vac 60 Hz - 110 Vac 60 Hz)
230 Vac x2 , pre wiring for vx 70 slit lamp



# 232

### **FEATURES AND BENEFITS**

- Motorized phoropter arm included
- Panel control included, also delivered with a remote control for more comfort
- Drawer for trial lenses set
- Available right and left hand
- Column with ambient led light and support for the chart projector
- Electrical elevation of chair
- Foot rest
- Arm rests

# **VISIONIX VX2000**

### **COMFORTABLE TRENDSETTER UNIT**

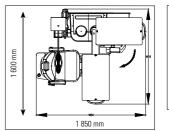


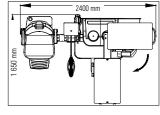
### **TECHNICAL SPECIFICATIONS**

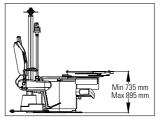
Dimensions	1600 X 1850	
Weight	220 Kg (485 lbs)	
Height of the seat (mm)	530 - 720 mm	
Height of the Table VX2000	870 mm	
Height of the table version H	735 - 895 mm	
Maximum weight for the table	External position 15 Kg (33 lbs) Internal position 25 Kg (55 lbs)	
Maximum weight for the chair	135 Kg (297 lbs)	
Voltage	230Vac 50 Hz (230Vac 60Hz – 110Vac 60Hz)	
Working table voltage	Instrument 1 = 12 V / Instrument 2 = 220 V	
Standards	ISO 9001:2008 - ISO 13485:2012	

### **FEATURES AND BENEFITS**

- Available in RIGHT or LEFT handed version
- Sliding table for 2 instruments
- Electro mechanic locking system for table in any position
- Console with touch-screen control panel + hand instruments support
- Drawer
- Column with adjustable led lamp and projector support plate
- Electric elevation chair
- Reclining back rest
- Removable arm rest and foot









# **VISIONIX VX3000**

### THREE INSTRUMENTS UNIT

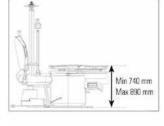


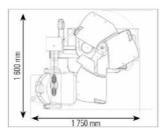
### **TECHNICAL SPECIFICATIONS**

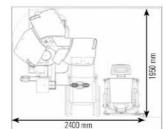
Dimensions	1600 X 1750	
Weight	250 Kg (551 lbs)	
Height of the seat	530 - 720 mm	
Table up/down	H Model	
Height of the Table VX3000	890 mm	
Height of the table version H	740 - 890 mm	
Maximum weight for the table	External position / Internal positions 30 Kg (66 lbs) Internal position 25 Kg (55 lbs)	
Maximum weight for the chair	135 Kg (297 lbs)	
Voltage	230Vac 50 Hz (230Vac 60Hz – 110Vac 60Hz)	
Working table voltage	Instrument 1 = 12 V / Instrument 2 = 220 V / Instrument 3 = 220 V	
Standards	ISO 9001:2008 - ISO 13485:2012	

### **FEATURES AND BENEFITS**

- Rotary table
- Available in RIGHT or LEFT handed version
- Table for 3 instruments with manual rotation and manual sliding working position
- Electro mechanic locking system for table in any
- Console with touch screen control panel + hand instruments support
- Column with adjustable led lamp and projector support plate
- Electric elevation chair
- Reclining back rest
- Removable arm rest and foot rest









# 19 OPERATION & PATIENT CHAIRS



# **500 XLE**

Our classic. It represents proven and time-tested technology in a modern design, it is deliberately low-tech, and it offers an extremely attractive price-performance ratio. Its chief benefits include space-saving design and outstanding maneuverability coupled with a lean range of easy-to-manage functions.

Do you want flexible use in confined spaces with powersupply independent battery operation?

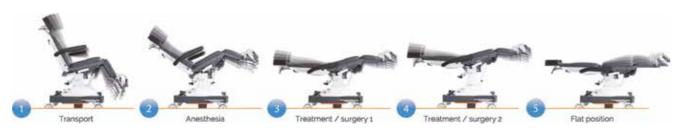
Then you should go for our classic: The 500 XLE, 500 XLE comfort or 500 bariatric, for optimal combination with our surgiLine and surgiTrend surgeon·s chairs.

Designed for continuous use in serially equipped operating rooms with high patient turnover, the performanceLine satisfies every user thanks to its easy handling before, during and after the surgery.

An award-winning "Preventive Technology", the performanceLine works hard to proleet your surgical staff from back problems, thanks to its lightweight construction and easy maneuverability.







### **TECHNICAL SPECIFICATIONS**

Chassis	
- Frame profile	90x 50 mm
- Outside length	785mm
- Outside width	720mm

- Steel tube frame, powder-coated elegant anthracite matte finish
- Brake operable from both sides and acting on two castors each; two castors featuring independent directional steering function

- Double rimmed castors	Ø 125 mm	
- Detachable foot keypad (total. head up/down)		

- Emergency stop button
- Visible screws are made of stainless steel
- With equipotential bonding connection

### Upper frame

- 4-part support frame (head, back, seat. leg part)
- Removeable upholstery

	D:i	
- Length	1.760 - 1.900 mm (incl. foot part extension) + 190 mm	
- Width incl . armrests	850mm	
- Width of upholstery	610mm	

	190 mm	
	Angle	Dimensions (Lx W)
- Head part	- 2° / +35°	255 x 245 mm
- Back part	0°/+83°	610 x 610 mm
- Seat part	-5°/+35°	450 x 610 mm
- Leg part	0°/+77°	510 x 610 mm
- Height adjustment	625- 925 mm (comfort) 655 - 955 mm	
- Armrests	0°/+180°	(2x) 470x 75 mm
- Trendelenburg	-12°/+5″	
- Entry hight	580 mm (comfort) 610 mm (incl. foot part extension) - 80 mm	
- Legroom	520- 820 mm	

### Electrical control

- All components according to IPX4
- Manual keypad with 8 individually programmable memory positions, auto run function, reset button
- Foot keypad with 4 footswitches and reactivation button

### **Electric Drives**

- Head, back, seat. leg part. total up/down
- Trendelenburg / Reverse Trendelenburg

### Lifting column

- Max. lifting	300 mm
- Max. patient weight	250 kg

- Motors IPX4 with HAL sensors, to be memorized



**EYEFORCE** 



# **EYEFORCE**

Our most innovative & modern patient positioning system with auto-run functions - specialized for precision surgery in head area. With e-drive easy-push aid, Steering Guide and SES automated extension system - for even more ergonomics & economy at your workplace.

### **EYEFORCE + EDRIVE**

e-drive system for effortless and rapid movement of the chair over long distances. The new optional system consists of a 5th wheel with drive motor. It serves as a pushing aid for easy forward and backward movement – with an extra range of 2 kilometers per battery charge. The system's operation is identical to that of the "Steering Guide" system, via the respective push handles with potentiometer for infinite and precise speed adjustment. It is possible to integrate the system any time at a later date.







### **TECHNICAL SPECIFICATIONS**

Chassis	
- Outside length	900 mm
- Outside width	662 mm

- Brake system acting on all four castors
- Directionally guided steering ("Steering Guide"), easily activated at the push of a button
- Castor diameter, electr. Ø150 / 100 mm conductiev
- Foot control element with joystick (total, head, back, Trendelenburg up / down)
- Emergency stop button
- Optional push-aid (e-drive)
- With equipotential bonding connection
- Abrasion-resistant corner guards (orange) made of synthetic rubber

### Upper frame

ad, back, seat, leg	g part)
40 mm	
650 mm	
25 x 10 mm	
700 mm	
1.780 – 1.900 mm	
Angle	Dimensions (Lx W)
-31°/+22°	255 x 245 mm
0°/+75°	540 x 650 mm
-5°/+26	450 x 650 mm
0°/+78°	510 x 610 mm
640 – 900 mm	
-26°/+6°	
	580 mm
470 - 730 mm	
	40 mm 650 mm 25 x 10 mm 700 mm 1.780 – 1.900 Angle -31° / +22° 0° / +75° -5° / +26 0° / +78° 640 – 900 mm -26° / +6°

### **Electrical control**

### Manual keypad

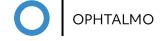
- Memory controller with 10 buttons for head, back, seat, leg part - total up / down; 2 buttons for directionally guided steering, 1 button for electronic brake, 1 easy entry button, memory button, on-off button, auto-run
- 5 freely programmable memory positions
- Visual battery level indicator

### Foot control element

- Foot control element 2 joysticks plus activation switch
- Optional push-aid (e-drive)

### Electric drives

- Head, back, seat, leg part, total up / down
- Trendelenburg / Reverse Trendelenburg







# 20 AUTOCLAVES

STATIM G4 **SciCan** 

# **STATIM G4**

STATIM is the world's fastest cassette autoclave from start to sterile™, gentle on your instruments due to its patented steam process and relied upon by the busiest of practices.



Drawing on over 25 years of innovation, the leader in autoclave technology has created a complete line of STATIM Cassette Autoclaves – designed to meet the needs of every size of practice. The STATIM family comprises the fastest, most innovative cassette autoclaves available on the market today.

### Fast

STATIM G4 is the fastest cassette sterilizer from start to sterile. Using only a small amount of water for each cycle, the STATIM heats and converts to steam in mere seconds. The innovative design of STATIM's fully removable chamber allows for quick heating and cooling.

A complete solution: rapid sterilization with rapid drying via the STATIM Dri-Tec drying technology.

G4 Technology - information at your fingertips. WiFi enabled G4 technology can connect and send cycle data to your smart devices or computer, allowing staff to focus on the most important thing in a dental practice, the patients. Maintenance reminders, instructions and the option for automatic software updates keep your STATIM in good working order. G4 technology connects your STATIM to

specialized technicians, which allows for remote support and minimizes unnecessary downtime.

### Reliable

For over 25 years, STATIM's speed, reliability and dependability have made it the ideal sterilizer for every practice. Healthcare practitioners in over 90 countries around the world rely on STATIM to protect their patients and staff from infection. The spirit of innovation that made STATIM an integral part of every Stericentre over 25 years ago is still evident with the technological advancements like  $\ensuremath{\mathsf{G4}}$  technology that bring automation to the Stericentre. Whether as a stand-alone product or in combination with the Bravo Chamber Sterilizer, dentists rely on STATIM for fast and efficient instrument turnaround.





The 3.5" high resolution touchscreen provides a wealth of information.



Access your STATIM G4 via your networked



The STATIM G4 is capable of communicating directly with service personnel.



Wrapped dental handpieces in the STATIM 2000 G4 cassette



Wrapped dental handpieces in the STATIM 5000 G4 cassette



Wrapped phaco handpiece in the STATIM 5000 G4 cassette





# **TRIAL LENSES SETS**

### REF. 7190022

Dim. 35 x 26 x 5 cms

Standard series, metal rings

- 84 lenses and 6 accessories :
- 34 concave from -10 dpt to -0.25 dpt
- 34 convex lenses from +0.25dpt to + 10 dpt
- 16 cylindrical concave lenses from -3.00 dtp to -0.25 dpt

### Accessories:

Occluder, pinhole, slit, red maddox, green lens, red lens



### REF. 7190023

Dim.  $35.5 \times 24 \times 5 \text{ cms}$ 

Standard series, plastic rings

- 98 lenses and 6 accessories
- 36 spheric concave lenses from -10.00 dpt to -0.25 dpt
- 36 spheric convex from +0.25 dpt to +10.00 dpt
- 12 cylindrical concave lenses from -3.00 dpt to -0.25 dpt
- 12 cylindrical convex lenses from +0.25 dpt to +3.00 dpt
- 1 prism of 0.5 and 1 prism of 1

### Accessories

Occluder, pinhole, slit, frosted, red lens, Jackson 0,25



### REF. 7190051

Dim. 52 x 35 x 5 cms

Large series, metal rings

- 80 spheric concave lenses from -20 dpt to -0.12 dpt80
- spheric convex lenses from +0.12 dpt to +20 dpt40
- cylindrical concave lenses from 6.00 dpt to -0.12 dpt40
- cylindrical convex lenses from +0.12 dpt to +6.00 dpt12
- prims froms +0.50 dpt to +8 dpt



### Accessories:

1 red, 1 green, 1 black, 2 plain lenses, 2 Maddox, 1 slit, 1 Polariscope, 2 cross, 1 frosted, 2 pinholes, 2 cross cylinder

### REF. 7190021

Dim.  $58 \times 38 \times 5 \text{ cms}$ 

Large series, plastic rings

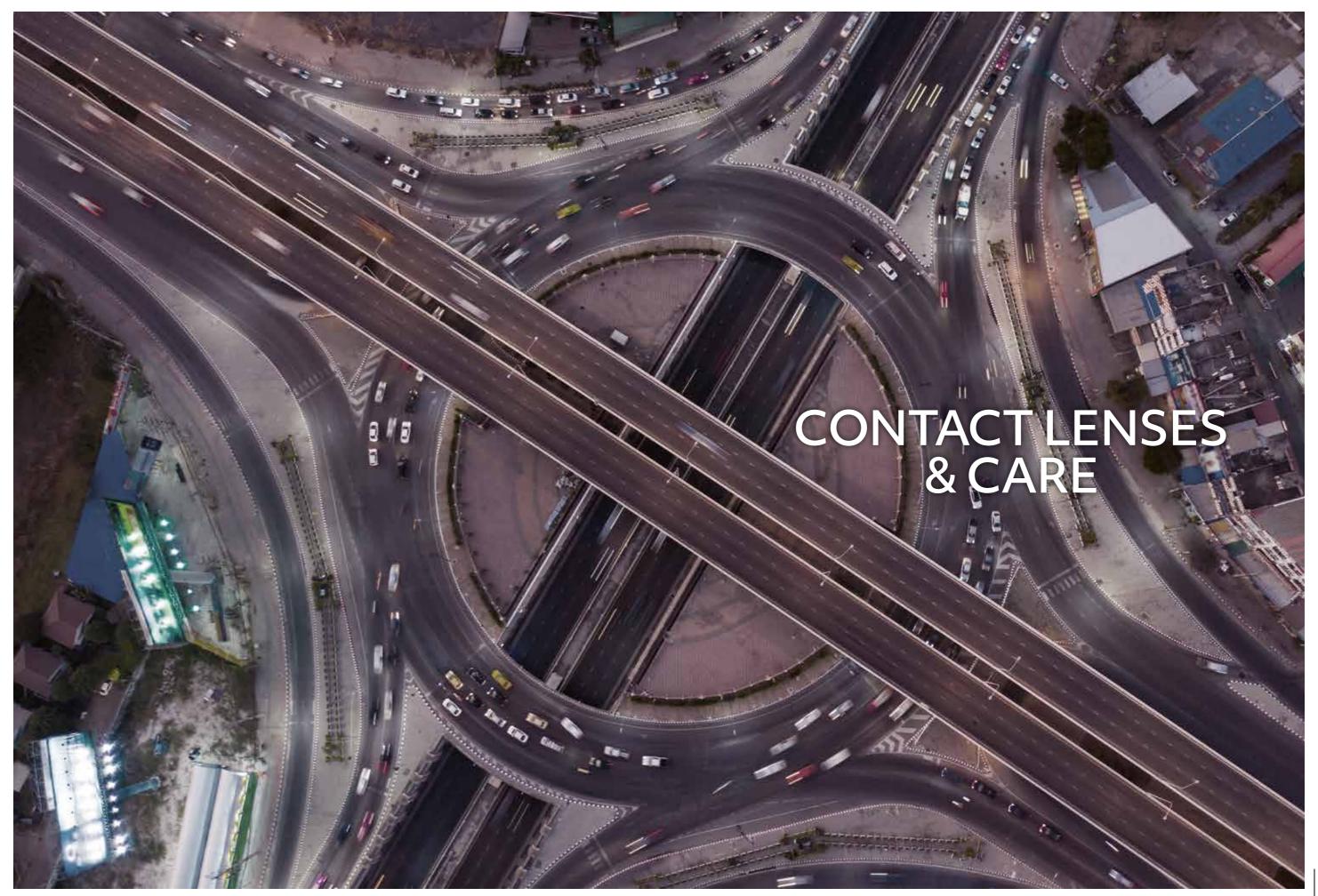
- 228 lenses and 10 accessories
- 68 spheric concave lenses from -20.00 dpt to -0.25 dpt
- 8 spheric concave lenses from +0.25 dpt to +20.00 dpt
- 38 cylindrical concave lenses from -6.00 dpt to -0.12 dpt
- 38 cylindrical convex from +0.12 dpt to +6.00 dpt
- 10 prisms lenses (1,2,3,4,5,6,7,8,9,10)

### Accessories:

2 pin holes (1small et 1 large model) - 1 slit, 2 occluders -1 white Maddox - 1 frosted - 1 red lens - 1 green lens - 1 plain lens









### **CONTACT LENSES & CARE**

Ophtalmo meets a variety of eye treatment needs and supplies ophthalmologists and hospitals with a wide range of custom hard contact lenses, soft contact lenses and contact lens solutions.

Right from the very beginning in 1991, we decided to complement our quality products with matching quality service and advice. We work with almost all contact lens suppliers. They help us to offer the best quality and latest innovations and developments. We use our knowledge, experience and expertise to combine the best products, techniques and devices. Many ophthalmologists rely on us to provide the right contact lens solution for their patients.

### Soft contact lenses

- Daily contact lenses
- 14-day contact lenses
- Monthly contact lenses
- 90-day contact lenses
- Custom contact lenses
- Medical soft/therapeutic contact lenses
- Coloured contact lenses

### Hard contact lenses

- Rigid corneal contact lenses
- Medical corneal contact lenses
- Semi-scleral contact lenses
- Scleral contact lenses (mini sclera or full sclera)

### Treatment contact lenses

Treatment contact lenses are also referred to as therapeutic contact lenses. They are used to slow down myopia in children and adolescents. They can be hard or soft contact lenses:

- Soft non-standard or custom contact lenses
- Hard contact lenses
- Scleral contact lenses

### Medical contact lenses

- Medical soft contact lenses
- Therapeutic / Hand-painted soft contact lenses
- Hand-painted scleral contact lenses
- Medical corneal contact lenses
- Scleral contact lenses
- Bandage contact lenses
- Hybrid contact lenses

### All-In-One Solutions

Peroxides

Cleaners

Saline Solutions

### **OUR BRANDS**

### **CONTACT LENSES**







### **IMPLANT LENSES**











### **CONSUMABLES**

OUR

**BRANDS** 















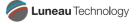






### **MEDICAL DEVICES**

























### **INSTRUMENTS**

















- SURGICAL
- CONSUMABLES
- MEDICAL DEVICE