# **OPTICS 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
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Magnification	6:1 zoom, motorized
Total magnification	$4.1 \times$ to $24.5 \times$ with $10 \times$ eyepiece $5.1 \times$ to $30.7 \times$ with $12.5 \times$ 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

# **UPGRADEABILITY**

OpenArchitecture	Prepared for integration of video camera systems, digital recording and imaging systems such as IOLcompass, EnFocus OCT, and monitors
Connectors	<ul> <li>Numerous built-in connectors for video and control data transfer</li> <li>Internal power supply 12 VDC, 19 VDC, 24 VDC and AC terminals</li> </ul>
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	<ul><li>LED for video record status</li><li>Surgeon information panel for setting status</li></ul>

# 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	<ul> <li>Floor stand approx. 350 kg without load</li> <li>C42 ceiling mount total approx. 260 kg</li> <li>CT42 telescope mount total approx. 200 kg</li> </ul>

## **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

