

Highlights 2019

Telepresence

Imaging Systems, Documentation,
Illumination, Equipment Carts



Introduction

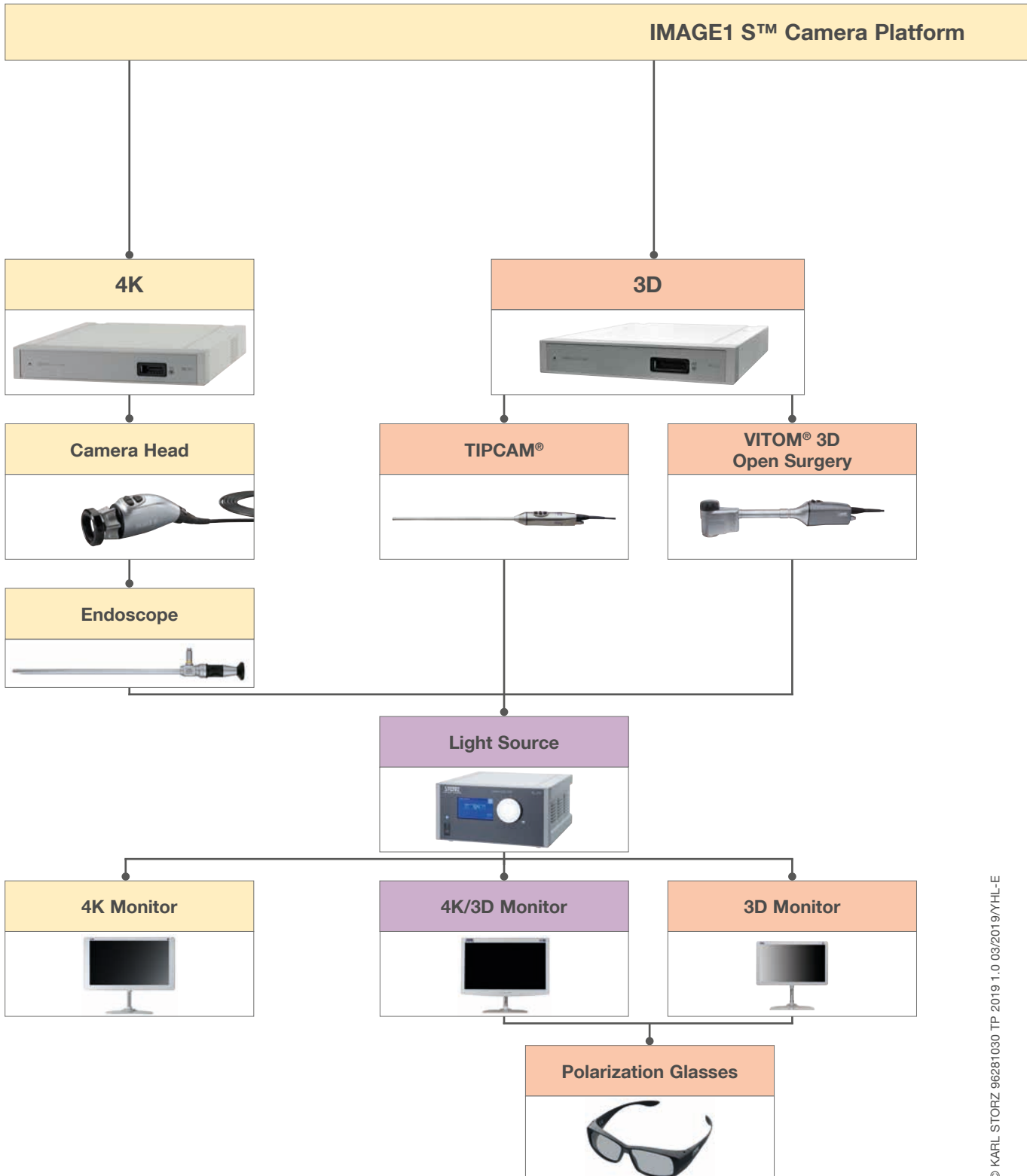
In minimally invasive surgery (MIS), excellent endoscopic imaging is a fundamental requirement for excellent surgical results.

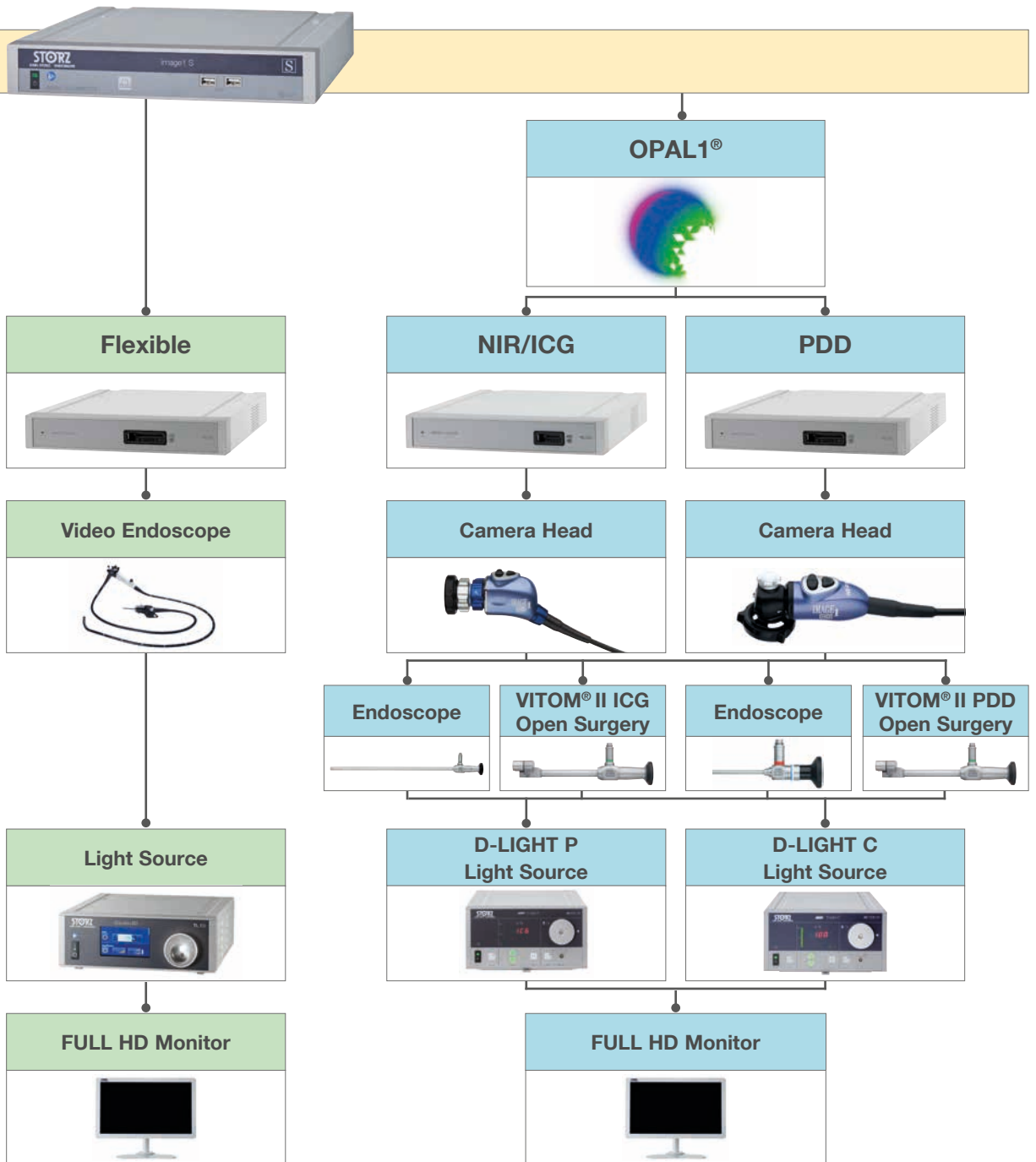
Before the endoscopic image is displayed on the monitor, the image is relayed through various links of the imaging chain starting with the light source and ending with the displayed image on the monitor.

All these links form the endoscopic imaging chain. For over 60 years, KARL STORZ has been a worldwide leader in the field of endoscopy. The family-run company, based in Tuttlingen, plays a pioneering role in this branch of the industry and offers complete systems with excellent image quality and perfectly matched components.

The rapid development of camera technology in recent years has resulted in a better view of the surgical field and a much wider treatment spectrum. This ultimately leads to better outcomes for patients. New standards in resolution as well as new technologies and innovative approaches form the basis for this trend.

Imaging: Overview





**NEW**

IMAGE1 S™ 4U – mORe than a camera

The IMAGE1 S™ 4U camera system allows the operating surgeon to make optimal use of the benefits offered by 4K technology. A notable feature is the image quality: High image brightness, impressive colors, greater richness of detail and a significantly improved depth effect characterize this system. Thanks to the system's modularity, 4U components can be easily integrated into the existing IMAGE1 S™ camera platform. Consequently, the system is still compatible with existing technologies (e.g., rigid, flexible, fluorescence and 3D endoscopy) and can be adapted to meet individual customer needs.

- IMAGE1 S™ 4U impresses with outstanding, razor-sharp images
 - Excellent image brightness
 - First-rate color rendition
 - Greater richness of detail
- Three innovative visualization technologies for tissue differentiation:
 - CLARA: Homogeneous illumination
 - CHROMA: Contrast enhancement
 - SPECTRA*: Spectral color shift and switch
- Easy integration into the IMAGE1 S™ camera platform

* not for sale in the U.S.

- TC 201EN* **IMAGE1 S CONNECT® II**, connect module, for use with up to 3 link modules, 4K technology, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ-SCB and digital Image Processing Module, power supply 100-240 VAC, 50/60 Hz
- TC 304 **IMAGE1 S™ 4U-LINK**, link module, for use with IMAGE1 S™ 4U camera heads, power supply 100-240 VAC, 50/60 Hz, for use with IMAGE1 S CONNECT® TC 200 or IMAGE1 S CONNECT® II TC 201
- TH 120 **IMAGE1 S™ 4U One-Chip 4K UHD Camera Head**, S-Technologies available, progressive scan, soakable, EO sterilization, H₂O₂ (hydrogen peroxide), focal length f = 18 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ 4U-LINK
- TM 440 **58" 4K Monitor**, screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 400 x 400 and VESA 400 x 200 adaptors
- TM 350 **32" 4K 3D Monitor**, screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, 5V DC output (1 A), wall mount with VESA 100 adaptor
- TM 342** **31" 4K Monitor**, screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 100 and VESA 200 adaptors
- TL 300 **Cold Light Fountain POWER LED 300 SCB**, with integrated KARL STORZ-SCB, high-performance LED module and one KARL STORZ light outlet, power supply 100-240 VAC, 50/60 Hz
- 495 NAC **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, with safety lock, enhanced light transmission, can be used for ICG applications, diameter 3.5 mm, length 230 cm
- 495 NCSC **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm
- 495 TIP **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, enhanced light transmission, diameter 4.8 mm, length 300 cm

* Also available in the following languages: DE, ES, FR, IT, PT, RU

** TM 342 not available in USA, Japan & China



4K Monitor Portfolio

In conjunction with the IMAGE1 S™ 4U camera system, new 4K monitors now complement the imaging chain from KARL STORZ. The monitors are available in various sizes and technologies (2D/3D) in order to meet the individual requirements of different interventions.

4K technology offers an extended color space combined with enhanced color saturation due to the implementation of the BT.2020 standard in the monitors.

Thanks to the special tempered safety glass, all monitors feature strong resistance to scratches and knocks.

With a screen diagonal of 32", the monitors feature an enclosed glass surface that allows quick and easy wipe disinfection to guarantee optimal hygiene properties.

TM 440 **58" 4K Monitor**, screen resolution 3840 x 2160, image format 16:9, video inputs: DP 1.2a, DVI-D, 12G-SDI, HDMI 2.0, USB Type B, USB Type A, RS-232C, 9-pin mini sub D, video outputs: 12G-SDI, power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 400 x 400 and VESA 400 x 200 adaptors

Suitable Mobile Cart for 58" 4K Monitor TM 440:

WA 10007 **OR1™ Cart for Monitor, Set**, height-adjustable, for monitors 42-64", VESA pattern min. 100/100, max. 400/400, monitor weight max. 60 kg, monitor holder height-adjustable on 180 cm high column, four castors, floor area: 980 x 830 mm, total height: 195 cm

TM 350 **32" 4K/3D Monitor**, screen resolution 3840 x 2160, image format 16:9, video inputs: DisplayPort 1.2, 12G-SDI, 2 x DVI-D, RS-232C, HDMI 2.0, HDMI 1.4b, USB Mini B, USB Micro AB, video outputs: 2x DVI-D, 12G-SDI, power supply 100-240 VAC, 50/60 Hz, 5V DC output (1 A), wall mount with VESA 100 adaptor

TM 342* **31" 4K Monitor**, screen resolution 3840 x 2160, image format 16:9, video inputs: DP 1.2a, 2x DVI-D, 12G-SDI, 3G-SDI, USB Type B, RS-232C, GPI, video outputs: DVI-D, 12G-SDI, 3G-SDI, power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 100 and VESA 200 adaptors

TM 340** **32" 4K Monitor**, screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 200 adaptor

* TM 342 not available in USA, Japan & China

** TM 340 for USA, Japan & China only



The OPAL1[®] NIR/ICG Technology based on IMAGE1 S[™] for the Visualization of the Fluorescent Dye Indocyanine Green (ICG)* in Near Infrared

Based on the IMAGE1 S[™] camera platform, KARL STORZ offers a laser-free FULL HD solution for the visualization of ICG in the vascular system, biliary tract, and lymphatic system. Thanks to a new color option, the preferred color for NIR/ICG visualization, i.e. blue or green, can be selected before or during the procedure. Furthermore, S-Technologies can be used under white light or in combination with the NIR/ICG mode. This can provide more intense fluorescence or better background lighting.

- Multidisciplinary camera head with high NIR sensitivity
- Xenon-based technology (no laser safety measures necessary)
- Part of the IMAGE1 S[™] camera platform – compatible with IMAGE1 S[™] H3-LINK
- All-in-one solution for laparoscopic and open surgery thanks to VITOM[®] II ICG
- Simplified use of the NIR/ICG functionality via IMAGE1 S[™]

* Please verify that the fluorescent dye indocyanine green is approved for the respective indication in your country.

TC 201EN*	IMAGE1 S CONNECT® II , connect module, for use with up to 3 link modules, 4K technology, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ-SCB and digital Image Processing Module, power supply 100-240 VAC, 50/60 Hz
TC 300	IMAGE1 S™ H3-LINK , link module, for use with IMAGE1 FULL HD three-chip camera heads, power supply 100-120 VAC/200-240 VAC, 50/60 Hz, for use with IMAGE1 S CONNECT® TC 200 or IMAGE1 S CONNECT® II TC 201
TH 102	IMAGE1 S™ H3-Z FI Three-Chip FULL HD Camera Head , S-Technologies available, for perfusion diagnosis of tissues and organs with indocyanine green (ICG) in conjunction with light source D-LIGHT P, progressive scan, with integrated Parfocal Zoom Lens, focal length f = 15-31 mm (2x), 2 freely programmable camera head buttons, for use with IMAGE1 S™ H3-LINK and IMAGE 1 HUB™ HD/IMAGE1 HD
TM 342**	31" 4K Monitor , screen resolution 3840 x 2160, image format 16:9
TM 220	27" FULL HD Monitor , screen resolution 1920 x 1080, image format 16:9
20 1337 01-1	Cold Light Fountain D-LIGHT P SCB , with integrated KARL STORZ-SCB, high-performance light unit for perfusion assessment, autofluorescence and standard endoscopic diagnosis, including a 300 Watt Xenon bulb and KARL STORZ light cable outlet, power supply 100-125/220-240 VAC, 50/60 Hz
495 NCSC	Fiber Optic Light Cable , with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm
495 NAC	Fiber Optic Light Cable , with straight connector, extremely heat-resistant, with safety lock, enhanced light transmission, can be used for ICG applications, diameter 3.5 mm, length 230 cm
26003 ACA	HOPKINS® Straight Forward Telescope 0° , enlarged view, diameter 10 mm, length 31 cm, autoclavable , for indocyanine green (ICG), fiber optic light transmission incorporated, for use with Fiber Optic Light Cable 495 NCSC, Fluid Light Cable 495 FQ/FR and Cold Light Fountain D-LIGHT P SCB 20 1337 01-1, color code: green
26003 BCA	Same , forward-oblique telescope 30°, enlarged view, color code: red
26046 ACA	HOPKINS® Straight Forward Telescope 0° , enlarged view, diameter 5 mm, length 29 cm, autoclavable , for indocyanine green (ICG), fiber optic light transmission incorporated, for use with Fiber Optic Light Cable 495 NAC, H3-Z FI camera head and Cold Light Fountain D-LIGHT P SCB 20 1337 01-1, color code: green
26046 BCA	Same , forward-oblique telescope 30°, enlarged view, color code: red
8710 AGA	HOPKINS® Straight Forward Telescope 0° , for perfusion assessment, autofluorescence and white light diagnosis, diameter 5.8 mm, length 20 cm, autoclavable , fiber optic light transmission and filter exchanger incorporated, color code: green
8711 AGA	Same , diameter 10 mm
20916025 AGA	VITOM® II NIR/ICG Telescope 0° , with integrated illuminator and observation filter for fluorescence diagnostics with ICG, HOPKINS®, working distance 25-75 cm for white light, 20-30 cm for fluorescence applications, length 11 cm, autoclavable , with fiber optic light transmission incorporated and condenser lenses, color code: green
962407 26	Demo Card Fluorescence Imaging , test and demonstration card for NIR/ICG

* Also available in the following languages: DE, ES, FR, IT, PT, RU

** TM 342 not available in USA, Japan & China



Stop Guessing. Start Knowing.

PDD – flexibility in visualization with IMAGE1 S™

With Photodynamic Diagnosis (PDD) in FULL HD quality, another component has been added to the IMAGE1 S™ camera platform. The most outstanding feature of the HX FI camera heads is their versatile application possibilities. In addition to the PDD OPAL1® technology, the S-Technologies CHROMA, SPECTRA A* and SPECTRA B* can also be displayed in white light.

- Versatile camera heads with PDD fluorescence imaging and S-Technologies
- Brilliant, razor-sharp FULL HD imaging
- Impressive lightweight and ergonomic design
- Both standard and pendulum camera heads available
- Part of the IMAGE1 S™ camera platform – compatible with IMAGE1 S™ X-LINK
- Easy-to-use PDD functionality via IMAGE1 S™

* not for sale in the U.S.

- TC 201EN* **IMAGE1 S CONNECT® II**, connect module, for use with up to 3 link modules, 4K technology, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ-SCB and digital Image Processing Module, power supply 100-240 VAC, 50/60 Hz
- TC 301 **IMAGE1 S™ X-LINK**, link module, for use with flexible video endoscopes and one-chip camera heads (up to FULL HD), power supply 100-120 VAC/200-240 VAC, 50/60 Hz, for use with IMAGE1 S CONNECT® TC 200 or IMAGE1 S CONNECT® II TC 201
- TH 113 **IMAGE1 S™ HX-P FI One-Chip FULL HD Pendulum Camera Head**, S-Technologies (CHROMA, SPECTRA*** A and B) available, OPAL1® technologies (PDD) in conjunction with light source D-LIGHT C or D-LIGHT C/AF, with pendulum system and fixed focus, progressive scan, soakable, EO sterilizable, H₂O₂ (hydrogen peroxide), focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ X-LINK
- TH 112 **IMAGE1 S™ HX FI One-Chip FULL HD Camera Head**, S-Technologies (CHROMA, SPECTRA*** A and B) available, OPAL1® technologies (PDD) in conjunction with light source D-LIGHT C or C/AF, fixed focus, progressive scan, soakable, EO sterilizable, H₂O₂ (hydrogen peroxide), focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ X-LINK
- TM 342** **31" 4K Monitor**, screen resolution 3840 x 2160, image format 16:9
- TM 220 **27" FULL HD Monitor**, screen resolution 1920 x 1080, image format 16:9
- 20 133601-133 Cold Light Fountain D-LIGHT C/AF SCB**, with integrated KARL STORZ-SCB, high-performance light unit for photodynamic diagnosis (PDD) ALA URO/ALA NEURO/Hypericin/Autofluorescence and for standard endoscopic diagnosis, with 300 Watt Xenon bulb, power supply 100-125/220-240 VAC, 50/60 Hz
- 20 133601-1 Cold Light Fountain D-LIGHT C SCB**, with integrated KARL STORZ-SCB, high-performance light unit for photodynamic diagnosis (PDD) ALA URO/ALA NEURO/Hypericin and for standard endoscopic diagnosis, with 300 Watt Xenon bulb and KARL STORZ light cable connection, power supply 100-125/220-240 VAC, 50/60 Hz
- 495 FS **Fluid Light Cable**, diameter 2 mm, length 220 cm
- 495 FO **Fluid Light Cable**, diameter 3 mm, length 180 cm
- 495 FP **Fluid Light Cable**, diameter 3 mm, length 250 cm
- 495 FR **Fluid Light Cable**, diameter 5 mm, length 250 cm
- 27005 AIA **HOPKINS® Straight Forward Telescope 0°**, enlarged view, diameter 4 mm, length 30 cm, **autoclavable**, for photodynamic diagnosis (PDD), fiber optic light transmission incorporated, special filter, color code: green
- 27005 BIA **HOPKINS® Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 30 cm, **autoclavable**, for photodynamic diagnosis (PDD), fiber optic light transmission incorporated, special filter, color code: red
- 27005 CIA **HOPKINS® Lateral Telescope 70°**, enlarged view, diameter 4 mm, length 30 cm, **autoclavable**, for photodynamic diagnosis (PDD), fiber optic light transmission incorporated, special filter, color code: yellow
- 20 916025 AIA VITOM® II PDD Telescope 0°**, with integrated illuminator and observation filter for fluorescence diagnostics with PDD, HOPKINS®, working distance 25-75 cm for white light, 20-30 cm for fluorescence applications, length 11 cm, **autoclavable**, with fiber optic light transmission incorporated and condenser lenses, color code: green

* Also available in the following languages: DE, ES, FR, IT, PT, RU

** TM 342 not available in USA, Japan & China

*** not for sale in the U.S.

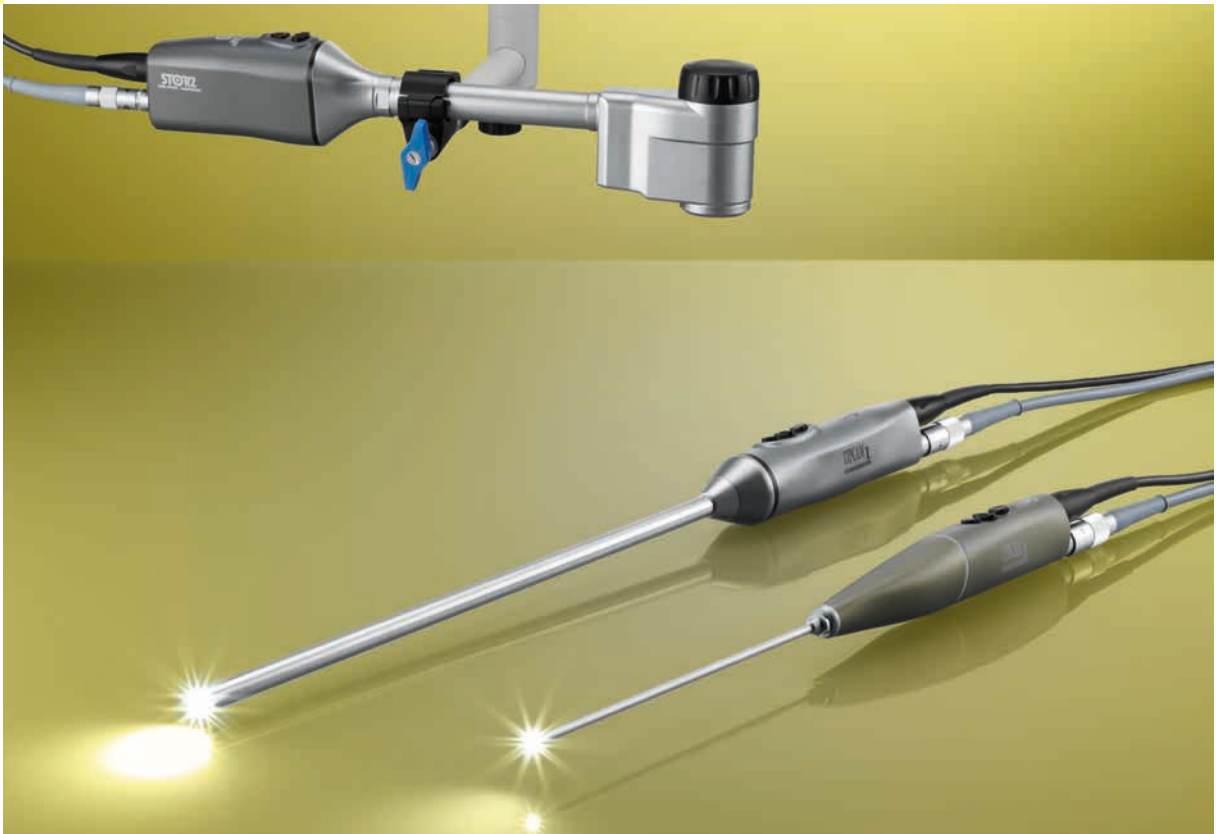


IMAGE1 S™ 3D – A Dimension Ahead

IMAGE1 S™ 3D provides surgeons with excellent depth perception. Furthermore, the 3D stereoscopic imaging system is particularly valuable for activities that demand a high degree of spatial perception. Thanks to the modular system design, existing 2D systems can be upgraded to 3D. The 3D camera platform from KARL STORZ impresses with its wide range of applications – from laparoscopy and gynecology through to ENT and microsurgical interventions.

- 3D system featuring video endoscopes with diameters of 10 mm and 4 mm as well as VITOM® 3D
- Easy toggle between 3D and 2D
- Easy integration into the IMAGE1 S™ platform
- Three innovative visualization technologies for easy tissue differentiation in 2D and 3D:
 - CLARA: Homogeneous illumination
 - CHROMA: Contrast enhancement
 - SPECTRA*: Spectral color shift and exchange

* not for sale in the U.S.



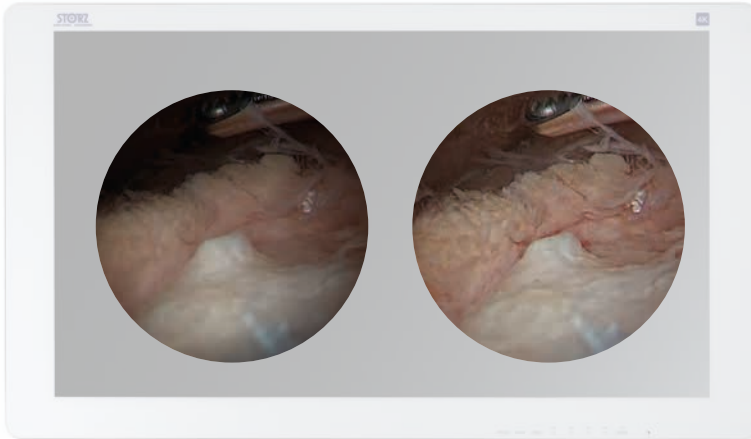
- TC 201EN* **IMAGE1 S CONNECT® II**, connect module, for use with up to 3 link modules, 4K technology, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ-SCB and digital Image Processing Module, power supply 100-240 VAC, 50/60 Hz
- TC 302 **IMAGE1 S D3-LINK®**, link module, for use with TIPCAM®1 S 3D and VITOM® 3D, power supply 100-120 VAC/200-240 VAC, 50/60 Hz, for use with IMAGE1 S CONNECT® TC 200 or IMAGE1 S CONNECT® II TC 201
- TC 015 **Extension Cable IMAGE1 S D3-LINK®**, length 250 cm, to extend the video connecting cable between a video endoscope and IMAGE1 S D3-LINK® (TC 302), for use with TIPCAM®1 S 3D LAP (26605 AA/BA) and TIPCAM®1 S 3D, diameter 4 mm (7240 AA3D/BA3D/FA3D, 28164 AA3D/BA3D/FA3D)
- 26605 AA **TIPCAM®1 S 3D LAP**, with two FULL HD image sensors, direction of view 0°, diameter 10 mm, length 32 cm, **autoclavable**, S-Technologies available, freely programmable camera head buttons, including video connecting cable, for use with IMAGE1 S D3-LINK®
- 26605 BA **TIPCAM®1 S 3D LAP**, with two FULL HD image sensors, direction of view 30°, diameter 10 mm, length 32 cm, **autoclavable**, S-Technologies available, freely programmable camera head buttons, including video connecting cable, for use with IMAGE1 S D3-LINK®
- 7240 AA3D **TIPCAM®1 S 3D ORL**, direction of view 0°, diameter 4 mm, length 18 cm, two FULL HD image sensors, **autoclavable**, S-Technologies available, freely programmable camera head buttons, including video connecting cable, for use with IMAGE1 S D3-LINK®

* Also available in the following languages: DE, ES, FR, IT, PT, RU

- 7240 BA3D **TIPCAM®1 S 3D ORL**, direction of view 30°, diameter 4 mm, length 18 cm, two FULL HD image sensors, **autoclavable**, S-Technologies available, freely programmable camera head buttons, including video connecting cable, for use with IMAGE1 S D3-LINK®
- 7240 FA3D **TIPCAM®1 S 3D ORL**, direction of view 45°, diameter 4 mm, length 18 cm, two FULL HD image sensors, **autoclavable**, S-Technologies available, freely programmable camera head buttons, including video connecting cable, for use with IMAGE1 S D3-LINK®
- 28164 AA3D** **TIPCAM®1 S 3D NEURO**, direction of view 0°, diameter 4 mm, length 18 cm, two FULL HD image sensors, **autoclavable**, S-Technologies available, freely programmable camera head buttons, including video connecting cable, for use with IMAGE1 S D3-LINK®
- 28164 BA3D** **TIPCAM®1 S 3D NEURO**, direction of view 30°, diameter 4 mm, length 18 cm, two FULL HD image sensors, **autoclavable**, S-Technologies available, freely programmable camera head buttons, including video connecting cable, for use with IMAGE1 S D3-LINK®
- 28164 FA3D** **TIPCAM®1 S 3D NEURO**, direction of view 45°, diameter 4 mm, length 18 cm, two FULL HD image sensors, **autoclavable**, S-Technologies available, freely programmable camera head buttons, including video connecting cable, for use with IMAGE1 S D3-LINK®
- TH 200 **VITOM® 3D**, with zoom and focus function, integrated illumination and horizontal alignment, working distance 20-50 cm, fiber optic light transmission incorporated, suitable for wipe disinfection, for use with IMAGE1 S D3-LINK® TC 302 and IMAGE1 PILOT TC 014
- TC 014 **IMAGE1 PILOT**, control unit with 3D wheel, 4 programmable function keys and USB port, for intuitive control of camera systems and connected units, for use with IMAGE1 S™ and VITOM® 3D TH 200
- TM 350 **32" 4K/3D Monitor**, screen resolution 3840 x 2160, image format 16:9
- TM 330 **32" 3D Monitor**, screen resolution 1920 x 1080, image format 16:9
- TM 263 **26" 3D-Monitor**, screen resolution 1920 x 1080, image format 16:9
- TM 003 **3D Polarization Glasses**, fogless, passive, for use with 3D monitors
- 9800 C **3D Clip-on Glasses**, circularly polarized
- TL 300 **Cold Light Fountain POWER LED 300**, with integrated KARL STORZ-SCB, high-performance LED module and one KARL STORZ light outlet
- 495 TIP **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, enhanced light transmission, diameter 4.8 mm, length 300 cm, for use with TIPCAM®
- 495 NAC **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, with safety lock, enhanced light transmission, can be used for ICG applications, diameter 3.5 mm, length 230 cm
- 495 VIT **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, enhanced light transmission, diameter 4.8 mm, length 550 cm
- 39501 XTC **Wire Tray for Cleaning, Sterilization and Storage** of TIPCAM®1 S 3D LAP Video Endoscopes 26605 AA/BA and one light cable, **autoclavable**, external dimensions (w x d x h): 640 x 150 x 87 mm
- 39501 STC **Wire Tray for Cleaning, Sterilization and Storage** of TIPCAM®1 S 3D ORL Video Endoscopes 7240 AA3D/BA3D and one light cable, **autoclavable**, external dimensions (w x d x h): 500 x 150 x 87 mm

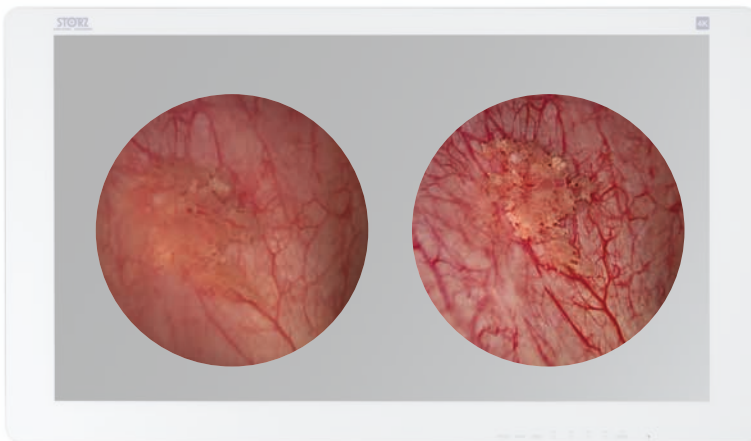
** Currently not available on CE markets

Comparison of S-Technologies:



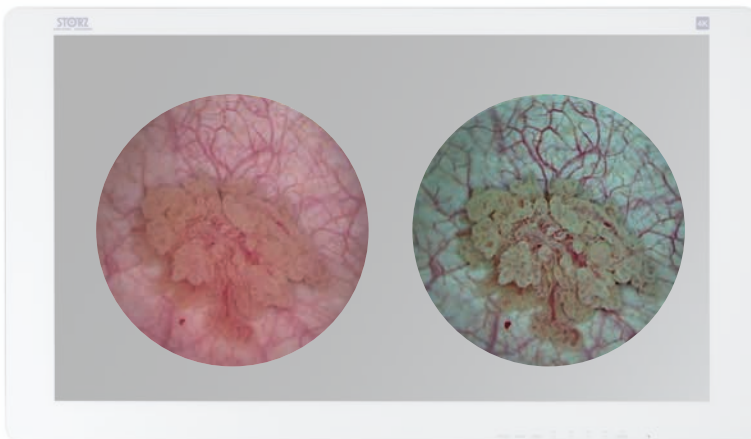
Standard image

CLARA



Standard image

CHROMA



Standard image

SPECTRA
(not for sale in the U.S.)



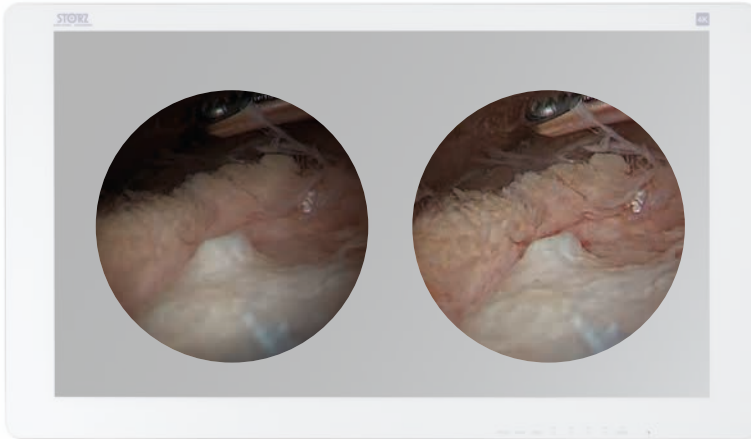
IMAGE1 S™ – As Individual as Your Requirements

The IMAGE1 S™ camera platform offers surgeons a single system for all applications. As a modular camera platform, IMAGE1 S™ combines various technologies (e.g., rigid, flexible and 3D endoscopy) in one system and can therefore be adapted to individual customer needs. Furthermore, near infrared (NIR/ICG) for fluorescence imaging, the integration of operating microscopes and the use of VITOM® 3D is possible via the camera platform.

- Individual modules can be selected according to user requirements, e.g., for rigid, flexible and 3D technology
- Automatic light source control
- Natural color rendition
- Three innovative visualization technologies for easy tissue differentiation in 2D and 3D:
 - CLARA: Homogeneous illumination
 - CHROMA: Contrast enhancement
 - SPECTRA*: Color shift and exchange

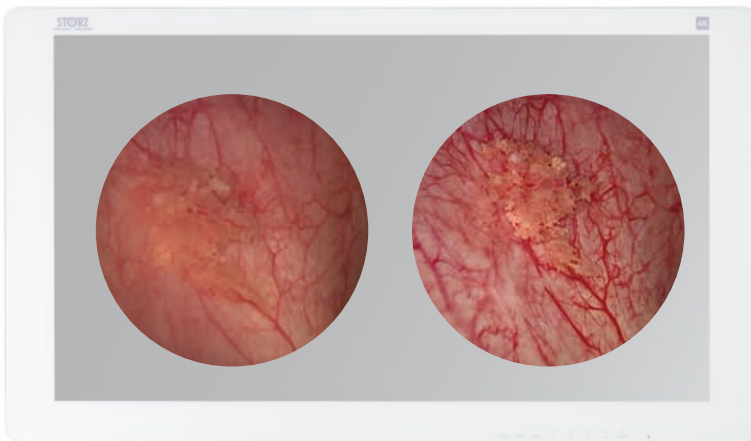
* not for sale in the U.S.

Comparison of S-Technologies:



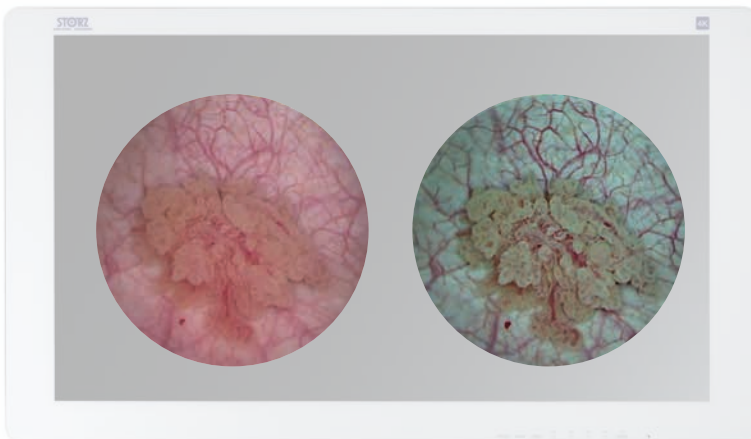
Standard image

CLARA



Standard image

CHROMA



Standard image

SPECTRA
(not for sale in the U.S.)

- TC 201EN* **IMAGE1 S CONNECT® II**, connect module, for use with up to 3 link modules, 4K technology, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ-SCB and digital Image Processing Module, power supply 100-240 VAC, 50/60 Hz
- TC 304 **IMAGE1 S™ 4U-LINK**, link module, for use with IMAGE1 S™ 4U camera heads, power supply 100-240 VAC, 50/60 Hz, for use with IMAGE1 S CONNECT® TC 200 or IMAGE1 S CONNECT® II TC 201
- TC 302 **IMAGE1 S D3-LINK®**, link module, for use with TIPCAM®1 S 3D and VITOM® 3D, power supply 100-120 VAC/200-240 VAC, 50/60 Hz, for use with IMAGE1 S CONNECT® TC 200 or IMAGE1 S CONNECT® II TC 201
- TC 301 **IMAGE1 S™ X-LINK**, link module, for use with flexible video endoscopes and one-chip camera heads (up to FULL HD), power supply 100-120 VAC/200-240 VAC, 50/60 Hz, for use with IMAGE1 S CONNECT® TC 200 or IMAGE1 S CONNECT® II TC 201
- TC 300 **IMAGE1 S™ H3-LINK**, link module, for use with IMAGE1 FULL HD three-chip camera heads, power supply 100-120 VAC/200-240 VAC, 50/60 Hz, for use with IMAGE1 S CONNECT® TC 200 or IMAGE1 S CONNECT® II TC 201
- TH 120 **IMAGE1 S™ One-Chip 4K UHD Camera Head**, S-Technologies available, progressive scan, soakable, EO sterilizable, H₂O₂ (hydrogen peroxide), focal length f = 18 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ 4U-LINK
- TH 113 **IMAGE1 S™ HX-P FI One-Chip FULL HD Pendulum Camera Head**, S-Technologies (CHROMA, SPECTRA**** A and B) available, OPAL1® technologies (PDD) in combination with light source D-LIGHT C or D-LIGHT C/AF, with pendulum system and fixed focus, progressive scan, soakable, EO sterilizable, H₂O₂ (hydrogen peroxide), focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ X-LINK
- TH 110 **IMAGE1 S™ HX One-Chip FULL HD Camera Head**, 50/60 Hz, fixed focus, progressive scan, soakable, EO sterilizable, H₂O₂ (hydrogen peroxide), focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ X-LINK
- TH 102 **IMAGE1 S™ H3-Z FI Three-Chip FULL HD Camera Head**, for perfusion diagnosis of tissues and organs with indocyanine green (ICG) in conjunction with light source D-LIGHT P, progressive scan, with integrated Parfocal Zoom Lens, focal length f = 15-31 mm (2x), 2 freely programmable camera head buttons, for use with IMAGE1 S™ H3-LINK and IMAGE 1 HUB™ HD/IMAGE1 HD
- TH 100 **IMAGE1 S™ Three-Chip FULL HD Camera Head**, 50/60 Hz, S-Technologies available, progressive scan, soakable, EO sterilizable, H₂O₂ (hydrogen peroxide), with integrated Parfocal Zoom Lens, focal length f = 15-31 mm (2x), 2 freely programmable camera head buttons, for use with IMAGE1 S™ H3-LINK TC 300 and IMAGE 1 HUB™ HD/IMAGE1 HD
- 26605 AA **TIPCAM®1 S 3D LAP**, with two FULL HD image sensors, direction of view 0°, diameter 10 mm, length 32 cm, **autoclavable**, S-Technologies available, freely programmable camera head buttons, including video connecting cable, for use with IMAGE1 S™
- 26605 BA **Same**, direction of view 30°
- 7240 AA3D **TIPCAM®1 S 3D ORL**, direction of view 0°, diameter 4 mm, length 18 cm, two FULL HD image sensors, **autoclavable**, S-Technologies available, freely programmable camera head buttons, including video connecting cable, for use with IMAGE1 S™
- 7240 BA3D **Same**, direction of view 30°
- 7240 FA3D **Same**, direction of view 45°

- 28164 AA3D** **TIPCAM®1 S 3D NEURO**, direction of view 0°, diameter 4 mm, length 18 cm, with two FULL HD image sensors, **autoclavable**, S-Technologies available, freely programmable camera head buttons, including video connecting cable, for use with IMAGE1 S D3-LINK®*
- 28164 BA3D** **Same**, direction of view 30°*
- 28164 FA3D** **Same**, direction of view 45°*
- TH 200 **VITOM® 3D**, with zoom and focus function, integrated illumination and horizontal alignment, working distance 20-50 cm, fiber optic light transmission incorporated, suitable for wipe disinfection, for use with IMAGE1 S D3-LINK® TC 302 and IMAGE1 PILOT TC 014
- TC 014 **IMAGE1 PILOT**, control unit with 3D wheel, 4 programmable function keys and USB port, for intuitive control of camera systems and connected units, for use with IMAGE1 S™ and VITOM® 3D TH 200
- TM 440 **58" 4K Monitor**, screen resolution 3840 x 2160, image format 16:9
- TM 350 **32" 4K/3D Monitor**, screen resolution 3840 x 2160, image format 16:9
- TM 342*** **31" 4K Monitor**, screen resolution 3840 x 2160, image format 16:9
- TM 220 **27" FULL HD Monitor**, screen resolution 1920 x 1080, image format 16:9
- TL 300 **Cold Light Fountain Power LED 300**, with integrated KARL STORZ-SCB, high-performance LED module and one KARL STORZ light outlet
- 495 NCSC **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm
- 495 NAC **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, with safety lock, enhanced light transmission, can be used for ICG applications, diameter 3.5 mm, length 230 cm

* Also available in the following languages: DE, ES, FR, IT, PT, RU

** Currently not available on CE markets

*** TM 342 not available in USA, Japan & China

**** not for sale in the U.S.



POWER LED 300 SCB – Powerful. Efficient. Durable.

The POWER LED 300 perfectly combines high performance with efficiency. Its intelligent cooling management and laser light technology combine the advantages of LED technology with the light output of a 300 Watt Xenon light source – in a unit offering extremely quiet operation. Durability, economy, environmental friendliness, and performance are the terms that best characterize this light source.

- Light intensity similar to a 300 Watt Xenon light source
- No lamp replacement required for 30,000 hours
- Constant light intensity throughout the operating life
- Low heat development
- Very quiet operation
- Energy savings thanks to high efficiency
- Environmentally friendly

- TL 300 **Cold Light Fountain POWER LED 300 SCB**, with integrated KARL STORZ-SCB, high-performance LED module and one KARL STORZ light outlet, power supply 100-240 VAC, 50/60 Hz
- TL 005 **Triple Adaptor**, for use with POWER LED 300 cold light fountain in conjunction with KARL STORZ, Olympus, Stryker and Wolf light cables
- 20 0901 70 **SCB Connecting Cable**, length 100 cm

Further recommended products:


- 20 1614 01-1 **Cold Light Fountain POWER LED 175 SCB**, with integrated KARL STORZ-SCB, high-performance LED and one KARL STORZ light cable connection, power supply 100-240 VAC, 50/60 Hz
- TL 100 S1 **Cold Light Fountain CO₂MBI® LED SCB**, with integrated KARL STORZ-SCB, high-performance LED and integrated insufflation pump for air and CO₂, power supply 100-240 VAC, 50/60 Hz, for use with KARL STORZ video endoscopes
- 20 1337 01-1 **Cold Light Fountain D-LIGHT P SCB**, with integrated KARL STORZ-SCB, high-performance light unit for perfusion assessment, autofluorescence, and standard endoscopic diagnosis, including a 300 Watt Xenon bulb and KARL STORZ light cable connection, power supply 100-240 VAC, 50/60 Hz



TELE PACK X LED – The Mobile All-in-One Solution with Network Connection

The TELE PACK series offers users a monitor, LED light source, camera control unit, and data management with integrated network function as a portable mobile solution in a single unit.

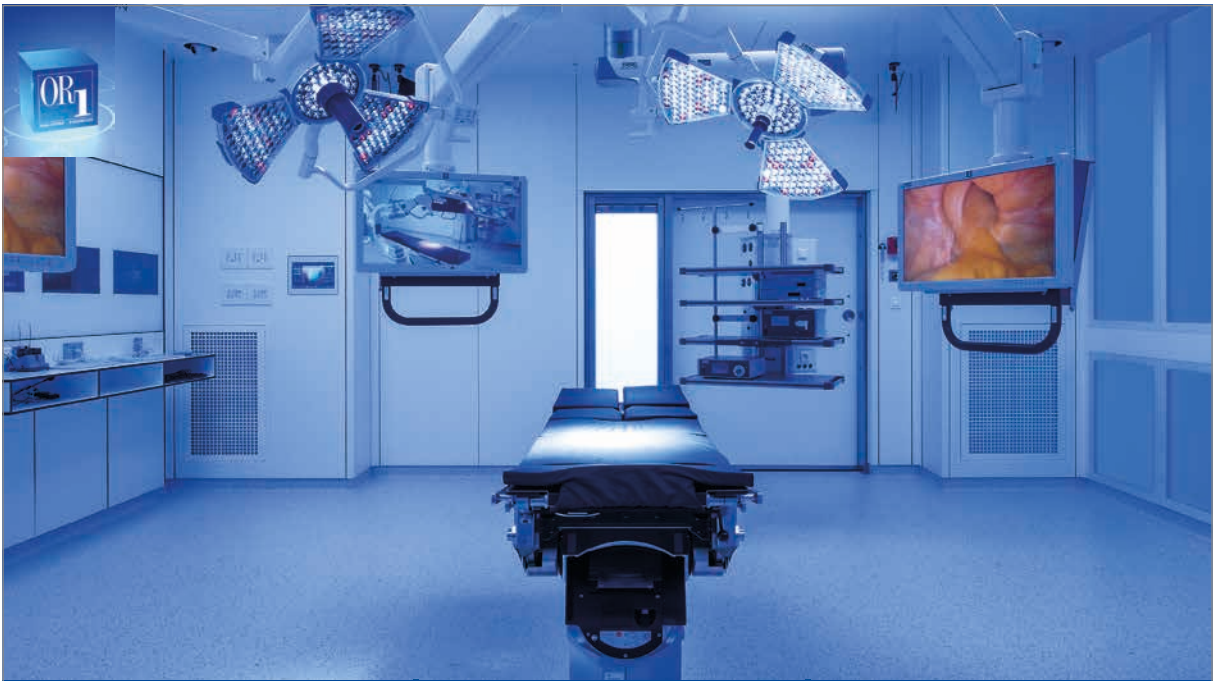
- For universal use in doctors' offices, emergency rooms, intensive care units and outpatient settings
- High performance LED light source ensures bright and uniform illumination with an average lamp life of 30,000 hours
- Archiving of still images and videos on USB flash drive, SD card or the hospital and/or practice network
- Compatible with all available KARL STORZ gastroscopes, colonoscopes and duodenoscopes as well as rigid endoscopes, fiberscopes, the flexible TROIDL rectoscope and the video rhino-laryngoscope
- Clear patient information
- Effective tool for medical training and further education

- TP 100EN* **TELE PACK X LED**, endoscopic video unit for use with all KARL STORZ TELECAM one-chip camera heads and video endoscopes, incl. LED light source similar to Xenon technology, with integrated digital Image Processing Module, 15" LCD TFT monitor with LED backlight, USB/SD memory module, color systems PAL/NTSC, power supply 100-240 VAC, 50/60 Hz
- TP 200 **TELE PACK X GI**, endoscopic video unit for use with all KARL STORZ TELECAM one-chip camera heads and video endoscopes, with integrated insufflation pump, incl. LED light source similar to Xenon technology, with integrated digital Image Processing Module, 15" LCD TFT monitor with LED backlight, USB/SD memory module, color systems PAL/NTSC, power supply 100-240 VAC, 50/60 Hz
- 20212030 **TELECAM One-Chip Camera Head**, color system PAL, soakable, gas-sterilizable, with integrated Parfocal Zoom Lens, f = 25-50 mm (2x), 2 freely programmable camera head buttons
- 20212130 **Same**, color system NTSC
- 20212032 **TELECAM Beamsplitter One-Chip Camera Head**, color system PAL, soakable, gas sterilizable, with rotating CCD sensor, f = 25 mm, 2 freely programmable camera head buttons
- 20212132 **Same**, color system NTSC
- 549 M **USB Color Printer**, power supply 100-240 VAC, 50/60 Hz, including mains cord, for use with IMAGE1 S™, IMAGE1 ICM from software version 470206-328 BI and AIDA® compact NEO
- 20014330 **Two-Pedal Footswitch**, one-stage
- 20040282 **USB Flash Drive**, 32 GB
- 20040281 **Same**, 4 GB
- Accessories for Network Integration**
- TP 001 **SD Card**, 32 GB, for use with all TELE PACK X and TELE PACK X LED models
- 20040276 **RJ-45 Network Cable**, length 100 cm
- 20040076 **RJ-45 Network Cable**, length 500 cm
- W21067 **OR1™ Network Isolator**, according to EN 60601, for galvanic decoupling of units with RJ-45 network connection (1 Gbit)
- Accessories for Stroboscopy**
- 40160040 **Stroboscopy Kit**, for use with TELE PACK X LED
- 20045030 **Adaptor**, for TELE PACK X, TELE PACK X LED, TELE PACK X GI and TELE PACK X VET, in combination with light cables and video endoscopes
- Accessories for Rigid Endoscopy**
- 040115-40** **Camera Cover**, telescopic folding with paper insertion aid, 13 x 242 cm, sterile, for single use, package of 40 STERILE 
- 20045030 **Adaptor**, for TELE PACK X, TELE PACK X LED, TELE PACK X GI and TELE PACK X VET, in combination with light cables and video endoscopes
- Accessories for Flexible Endoscopy**
- 20213070 **Video Connecting Cable**, for use between KARL STORZ video endoscopes and TELECAM Camera Control Units (CCU) or TELE PACK video units
- 20045031 **Light Adaptor for Video Endoscopes**, for TELE PACK X, TELE PACK X LED, TELE PACK X GI and TELE PACK X VET in combination with Video Bronchoscopes 11900 BP/BN and video gastroscopes

* Also available in the following languages: DE, ES, FR, IT, PT, RU



Imaging and OR Integration



Storage and administration of image and video data



SCENARA® .store

Flexible support for image sources



Centralized communication interface



SCENARA® .connect

OR1 88 1.0.01/2019/A-E

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Future-oriented integration meets innovative data management



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www.karlstorz.com

Further information and an overview of
Telepresence products from KARL STORZ
can be viewed on



in the Human Medicine section,
Cameras, light sources and documentation

It is recommended to check the suitability of the product for the intended procedure prior to use.



STORZ
KARL STORZ—ENDOSKOPE

THE DIAMOND STANDARD



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