Highlights 2021

Telepresence –
Imaging Systems, Documentation,
Illumination, Videocarts
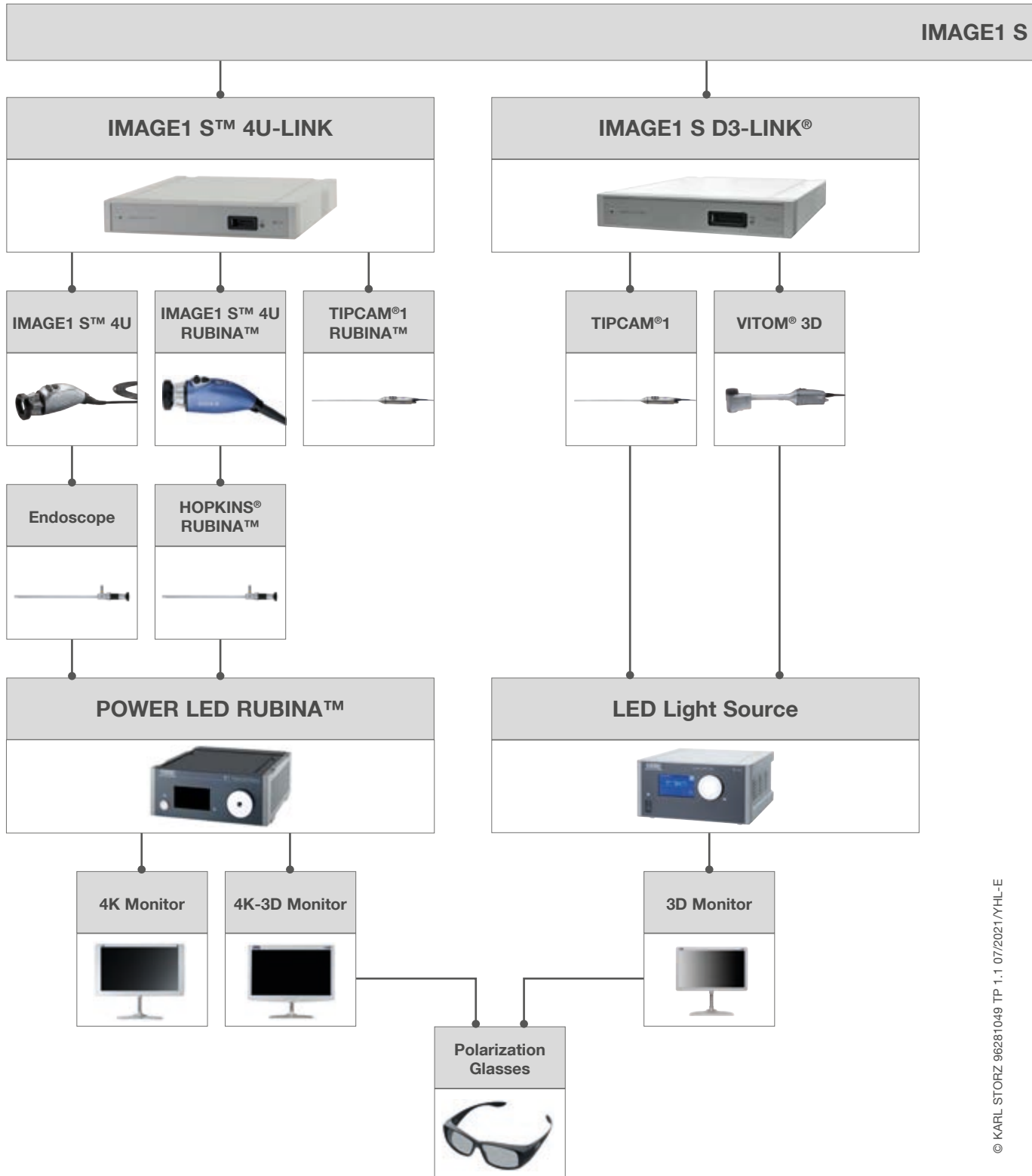
STORZ
KARL STORZ—ENDOSKOPE

Introduction

In minimally invasive surgery (MIS), excellent endoscopic imaging is a fundamental requirement for excellent surgical results.
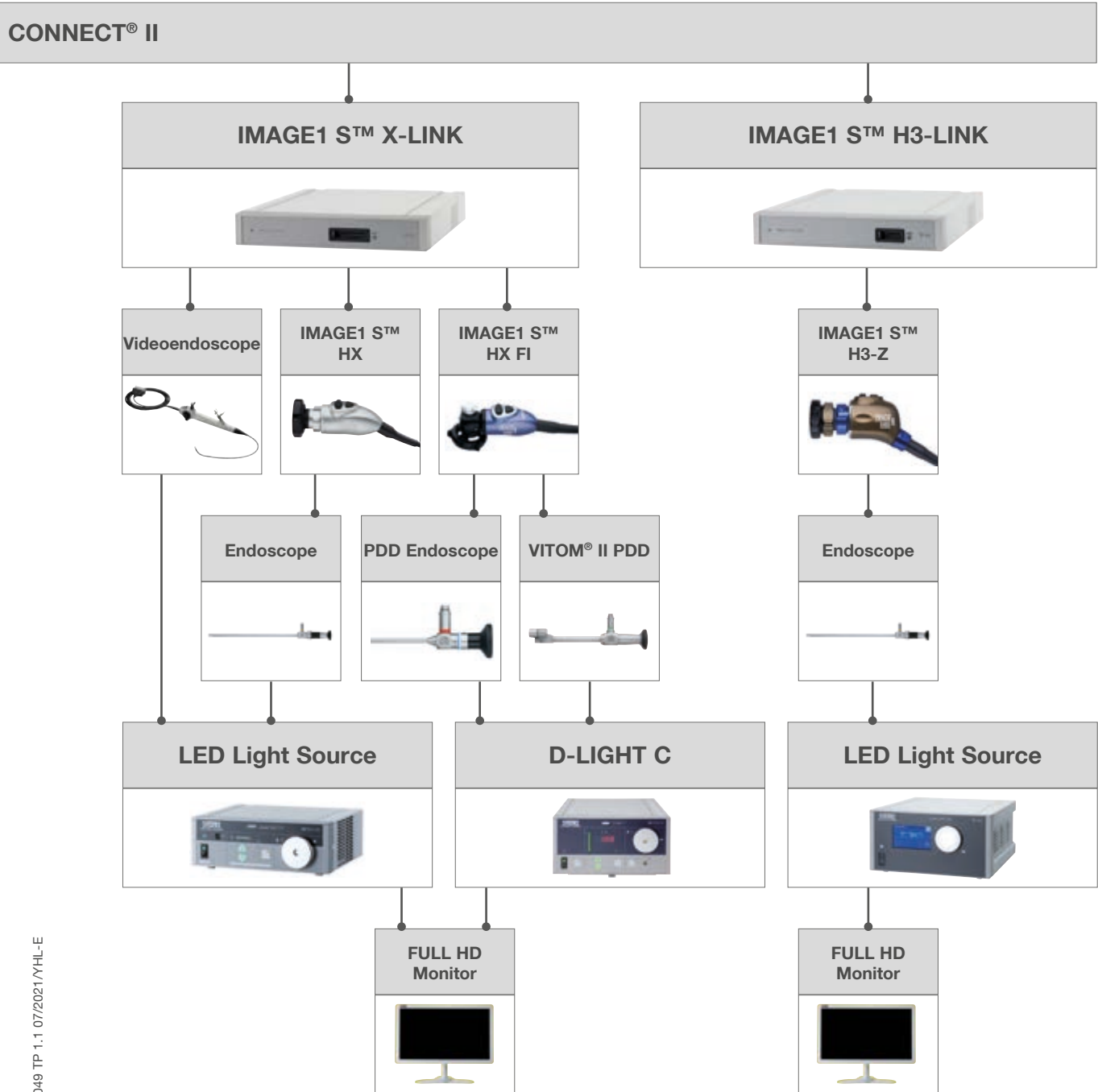
Before the endoscopic image is displayed on the monitor, the image is relayed through various links of the imaging chain starting with the light source and ending with the displayed image on the monitor.

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.

Overview: IMAGE1 S™ Camera Platform

IMAGE1 S

IMAGE1 S™ 4U-LINK

IMAGE1 S D3-LINK®

IMAGE1 S™ 4U

IMAGE1 S™ 4U RUBINA™

TIPCAM®1 RUBINA™

TIPCAM®1

VITOM® 3D

Endoscope

HOPKINS® RUBINA™

POWER LED RUBINA™

LED Light Source

4K Monitor

4K-3D Monitor

3D Monitor

Polarization Glasses

CONNECT® II

IMAGE1 S™ X-LINK

IMAGE1 S™ H3-LINK

Videoendoscope

IMAGE1 S™ HX

IMAGE1 S™ HX FI

IMAGE1 S™ H3-Z

Endoscope

PDD Endoscope

VITOM® II PDD

Endoscope

LED Light Source

D-LIGHT C

LED Light Source

FULL HD Monitor

FULL HD Monitor

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.

TC201EN*	**IMAGE1 S CONNECT® II,** connect module, for use with up to 3 link modules, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ-SCB or KS HIVE and digital Image Processing Module, power supply 100-240 VAC, 50/60 Hz
TC304	**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® TC200 or IMAGE1 S CONNECT® II TC201
TH121**	**IMAGE1 S™ 4U RUBINA™,** OPAL1® NIR/ICG, two-chip 4K UHD camera head, S-Technologies available, for NIR/ICG fluorescence imaging in combination with POWER LED RUBINA™, OPAL1® NIR/ICG, progressive scan, low-temperature sterilization, focal length f = 19 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S CONNECT® II and IMAGE1 S™ 4U-LINK
TH120	**IMAGE1 S™ 4U One-Chip 4K UHD Camera Head,** S-Technologies available, progressive scan, soakable, EO sterilization, H_2O_2 (hydrogen peroxide), focal length f = 18 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ 4U-LINK
TM440	**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
TM343	**32" 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
TM450	**55" 4K/3D Monitor,** screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, 100-240 VAC, 50/60 Hz, wall mount with VESA 200 and VESA 300 adaptors
TM009	**Signal Converter Set,** 12G-SDI – 4x 3G-SDI, for use with 55" 4K/3D Monitor TM450
TM350	**32" 4K/3D Monitor,** screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 100 adaptor
TL400	**Cold Light Fountain POWER LED RUBINA™,** for NIR/ICG fluorescence imaging and standard endoscopic diagnosis, with two LEDs and one KARL STORZ light cable connection, with integrated unit communication via KS HIVE, power supply 100-125/220-240 VAC, 50/60 Hz
TL300	**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
495NAC	**Fiber Optic Light Cable,** with straight connector, extremely heat-resistant, with safety lock, enhanced light transmission, diameter 3.5 mm, length 230 cm
495NCSC	**Same,** diameter 4.8 mm, length 250 cm
495TIP	**Same,** diameter 4.8 mm, length 300 cm

* Also available in the following languages: DE, ES, FR, IT, PT, RU
** For use with HOPKINS® RUBINA™ NIR/ICG telescopes

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.

TM440   **58" 4K Monitor,** screen resolution 3840 x 2160, image format 16:9, video inputs:
DisplayPort 1.2, 12G-SDI, HDMI 2.0, DVI-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

TM343   **32" 4K Monitor,** screen resolution 3840 x 2160, image format 16:9, video inputs:
DisplayPort 1.2, 12G-SDI, HDMI 2.0, DVI-D, 3G-SDI, video outputs: DisplayPort 1.2, 12G-SDI, DVI-D,
power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 100 and VESA 200 adaptors

TM450   **55" 4K/3D Monitor,** screen resolution 3840 x 2160, image format 16:9, video inputs:
5x 3G-SDI, DVI-D, HDMI 1.4b, video outputs: 5x 3G-SDI, DVI-D,
power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 200 and VESA 300 adaptors

TM009   **Signal Converter Set,** 12G-SDI – 4x 3G-SDI, for use with 55" 4K/3D Monitor TM450

                COR Mobile Stand with Monitor Holder, for use with TM440 and TM450:

UG804   **Subrack,** for COR mobile stand, high

UG811   **Top Cover Monitor Holder**

UG817   **Counterweight,** for monitors larger than 55"

UG820   **Shelf,** narrow

UG858   **55"/58" Monitor Module**

TM350   **32" 4K/3D Monitor,** screen resolution 3840 x 2160, image format 16:9, video inputs:
DisplayPort 1.2, 12G-SDI, HDMI 2.0, 2x DVI-D, HDMI 1.4b, video outputs: 12G-SDI, 2x DVI-D,
power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 100 adaptor

IMAGE1 S™ 4U RUBINA™ – mORe to discover

IMAGE1 S™ 4U RUBINA™ combines the latest imaging technologies 4K, 3D and fluorescence imaging (NIR/ICG) in one product family. The products impress with 4K image quality in 2D and 3D as well as new NIR/ICG fluorescence modes. The new POWER LED RUBINA™ makes this possible. The new modes, e.g. the superimposed NIR/ICG signal in the white light image, provide the user with valuable information. In addition, IMAGE1 S™ 4U RUBINA™ offers the display intensity of a NIR/ICG signal and a pure near infrared mode in monochromatic color display for the clear delineation of structures.

The following components are included in the IMAGE1 S™ 4U RUBINA™ product family:

- IMAGE1™ S 4U RUBINA™ – 4K camera head with new NIR/ICG functionalities
- TIPCAM®1 RUBINA™ – 4K-3D NIR/ICG videoendoscope with automatic horizon control
- POWER LED RUBINA™ – Laser-free LED light source for white light and excitation of NIR/ICG
- HOPKINS® RUBINA™ – Enhanced* NIR/ICG telescopes and new models

The IMAGE1 S™ 4U RUBINA™ technology thus provides new functionalities for the KARL STORZ fluorescence imaging system OPAL1® as well as very good image brightness and richness of color and detail.

* In comparison to previous models

TC201EN*	**IMAGE1 S CONNECT® II,** connect module, for use with up to 3 link modules, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ-SCB or KS HIVE and digital Image Processing Module, power supply 100-120 VAC/200-240 VAC, 50/60 Hz
TC304	**IIMAGE1 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® TC200 or IMAGE1 S CONNECT® II TC201
TH121**	**IMAGE1 S™ 4U RUBINA™,** OPAL1® NIR/ICG, two-chip 4K UHD camera head, S-Technologies available, for NIR/ICG fluorescence imaging in combination with POWER LED RUBINA™, OPAL1® NIR/ICG, progressive scan, low-temperature sterilization, focal length f = 19 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S CONNECT® II and IMAGE1 S™ 4U-LINK
26606ACA	**TIPCAM®1 RUBINA™,** OPAL1® NIR/ICG, 4K/3D, high-resolution videoendoscope with two distally integrated video chips, for NIR/ICG fluorescence imaging in combination with POWER LED RUBINA™, OPAL1® NIR/ICG and Sync Connecting Cable TL006, 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 CONNECT® II and IMAGE1 S™ 4U-LINK
26606BCA	**Same,** direction of view 30°
TL400	**Cold Light Fountain POWER LED RUBINA™,** for NIR/ICG fluorescence imaging and standard endoscopic diagnosis, with two LEDs and one KARL STORZ light cable connection, with integrated unit communication via KS HIVE, power supply 100-125/220-240 VAC, 50/60 Hz
UF101	**One-Pedal Footswitch,** one-stage
495NAC	**Fiber Optic Light Cable,** with straight connector, extremely heat-resistant, with safety lock, enhanced light transmission, diameter 3.5 mm, length 230 cm
495NCSC	**Same,** diameter 4.8 mm, length 250 cm
495TIP	**Same,** diameter 4.8 mm, length 300 cm
TM450	**55" 4K/3D Monitor,** screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall-mounted with VESA 200 and VESA 300 adaptors
TM009	**Signal Converter Set,** 12G-SDI – 4x 3G-SDI, for use with 55" 4K/3D Monitor TM450
TM350	**32" 4K/3D Monitor,** screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall-mounted with VESA 100 adaptor
TM003	**3D Polarization Glasses,** fogless, passive, for use with 3D monitors
9800C	**3D Clip-on Glasses,** circularly polarized
TM440	**58" 4K Monitor,** screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall-mounted with VESA 400 x 400 and VESA 400 x 200 adaptors
TM343	**32" 4K Monitor,** screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall-mounted with VESA 100 and VESA 200 adaptors

* Also available in the following languages: DE, ES, FR, IT, PT, RU
** For use with HOPKINS® RUBINA™ NIR/ICG telescopes

Power LED RUBINA™ – The New LED Light Source for White Light and NIR/ICG Applications

Power, efficiency, durability and flexibility are the hallmarks of the POWER LED RUBINA™ cold light source based purely on LED technology. The light source can be used for white light as well as fluorescence applications for displaying NIR/ICG or autofluorescence in the near infrared range. In conjunction with other RUBINA™ components, it allows the use of various new modes for displaying the NIR/ICG signal: A superimposed NIR/ICG signal in the white light image, an intensity display of the NIR/ICG signal as well as a pure near infrared mode in monochromatic color display for clear delineation of structures.

Only long-life LEDs are used so no laser protection measures are necessary

- Laser-free LED light source for white light and excitation of NIR/ICG
- OPAL1® NIR/ICG technology with new functionalities
- Straightforward user interface thanks to intuitive touch screen
- Constant light intensity maintained throughout the entire service life
- Very low volume

TL400	**Cold Light Fountain POWER LED RUBINA™,** for NIR/ICG fluorescence imaging and standard endoscopic diagnosis, with two LEDs and one KARL STORZ light cable connection, with integrated unit communication via KS HIVE, power supply 100-125/220-240 VAC, 50/60 Hz
UF101	**One-Pedal Footswitch,** one-stage
495NAC	**Fiber Optic Light Cable,** with straight connector, extremely heat-resistant, with safety lock, enhanced light transmission, diameter 3.5 mm, length 230 cm
495NCSC	**Same,** diameter 4.8 mm, length 250 cm
495TIP	**Same,** diameter 4.8 mm, length 300 cm
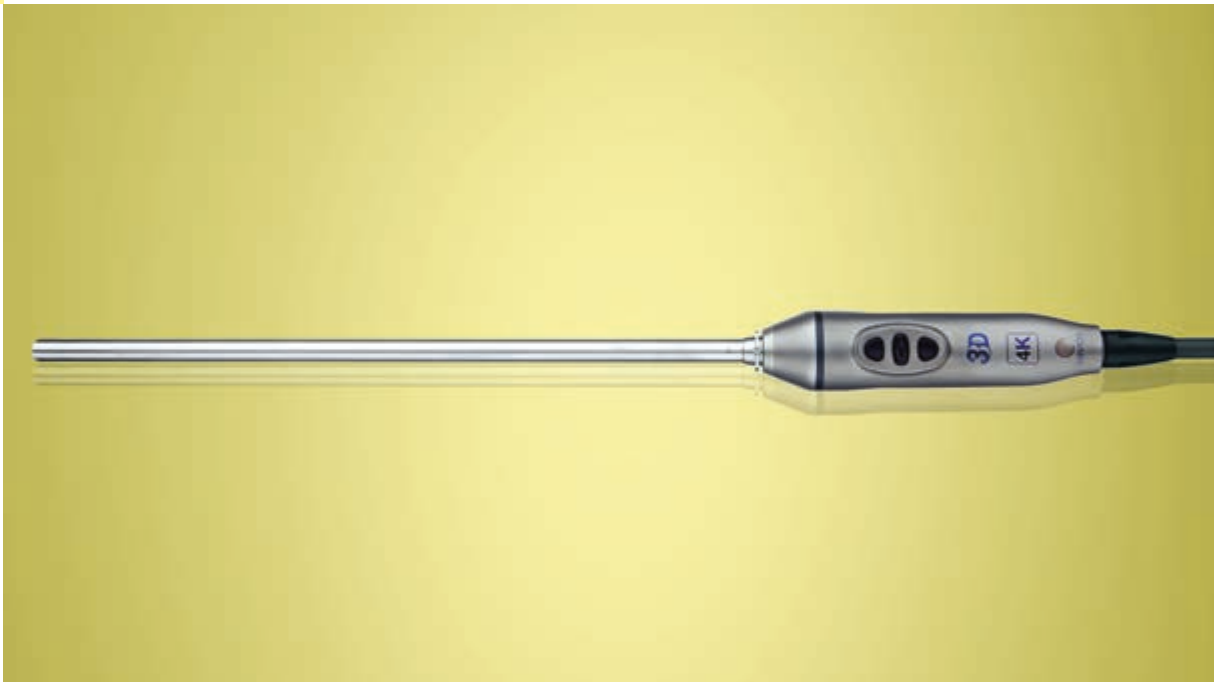
TIPCAM®1 RUBINA™ – The New 4K-3D NIR/ICG Videoendoscope

TIPCAM®1 RUBINA™ provides surgeons with excellent depth perception. This stereoscopic system offering 3D in 4K quality is particularly helpful when performing activities that require spatial vision. Thanks to the modular system design, existing IMAGE1 S™ 2D systems can be upgraded to 3D. Whether for laparoscopy, gynecology, urology or cardiothoracic surgery – the new TIPCAM®1 RUBINA™ features a wide range of applications.

- Automatic horizon control for better orientation and handling
- 4K-3D NIR/ICG videoendoscopes with 10 mm diameter as well as 0° and 30° directions of view
- Easy toggle from 3D to 2D
- OPAL1® NIR/ICG visualization modes: Overlay, Monochromatic and Intensity Map
- Easy integration into the IMAGE1 S™ platform

TC201EN*	**IMAGE1 S CONNECT® II,** connect module, for use with up to 3 link modules, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ-SCB or KS HIVE and digital Image Processing Module, power supply 100-240 VAC, 50/60 Hz
TC304	**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® TC200 or IMAGE1 S CONNECT® II TC201
26606ACA	**TIPCAM®1 RUBINA™,** OPAL1® NIR/ICG, 4K/3D, high-resolution videoendoscope with two distally integrated video chips, for NIR/ICG fluorescence imaging in combination with POWER LED RUBINA™, OPAL1® NIR/ICG and Sync Connecting Cable TL006, 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 CONNECT® II and IMAGE1 S™ 4U-LINK
26606BCA	**Same,** direction of view 30°
TL400	**Cold Light Fountain POWER LED RUBINA™,** for NIR/ICG fluorescence imaging and standard endoscopic diagnosis, with two LEDs and one KARL STORZ light cable connection, with integrated unit communication via KS HIVE, power supply 100-125/220-240 VAC, 50/60 Hz
UF101	**One-Pedal Footswitch,** one-stage
TM450	**55" 4K/3D Monitor,** screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, 100-240 VAC, 50/60 Hz, wall mount with VESA 200 and VESA 300 adaptors
TM009	**Signal Converter Set,** 12G-SDI – 4x 3G-SDI, for use with 55" 4K/3D monitor
TM350	**32" 4K/3D Monitor,** screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 100 adaptor
TM003	**3D Polarization Glasses,** fogless, passive, for use with 3D monitors
9800C	**3D Clip-on Glasses,** circularly polarized
495TIP	**Fiber Optic Light Cable,** with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 300 cm
39501XTC	**Wire Tray for Cleaning, Sterilization and Storage** of TIPCAM®1 S 3D videoendoscopes 26605AA/BA or TIPCAM®1 RUBINA™ 3D/4K videoendoscopes 26606ACA/BCA, 26616ACA/BCA and one light cable, **autoclavable,** external dimensions (w x d x h): 640 x 220 x 87 mm

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

IMAGE1 S™ 4U RUBINA™ – The New 4K NIR/ICG Camera Head

IMAGE1 S™ 4U RUBINA™ combines 4K imaging technology with fluorescence imaging for displaying NIR/ICG or autofluorescence in the near infrared range. The technology features very good image quality as well as new NIR/ICG fluorescence modes. The new modes, e.g. the superimposed NIR/ICG signal in the white light image, provide the user with valuable information. In addition, IMAGE1 S™ 4U RUBINA™ offers the display intensity of a NIR/ICG signal and a pure near infrared mode in monochromatic color display for the clear delineation of structures.

- Native 4K image resolution with very good image brightness and richness of color and detail
- OPAL1® NIR/ICG technology with new functionalities
- S-Technologies in white light and the overlay modes Overlay and Intensity Map
- Enhanced* NIR/ICG telescopes and new models
- Laser-free LED light source for white light and excitation of NIR/ICG

* In comparison to previous models

TC201EN* **IMAGE1 S CONNECT® II,** connect module, for use with up to 3 link modules, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ-SCB or KS HIVE and digital Image Processing Module, power supply 100-120 VAC/200-240 VAC, 50/60 Hz

TC304 **IIMAGE1 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® TC200 or IMAGE1 S CONNECT® II TC201

TH121** **IMAGE1 S™ 4U RUBINA™,** OPAL1® NIR/ICG, two-chip 4K UHD camera head, S-Technologies available, for NIR/ICG fluorescence imaging in combination with POWER LED RUBINA™, OPAL1® NIR/ICG, progressive scan, low-temperature sterilization, focal length f = 19 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S CONNECT® II and IMAGE1 S™ 4U-LINK

TL400 **Cold Light Fountain POWER LED RUBINA™,** for NIR/ICG fluorescence imaging and standard endoscopic diagnosis, with two LEDs and one KARL STORZ light cable connection, with integrated unit communication via KS HIVE, power supply 100-125/220-240 VAC, 50/60 Hz

UF101 **One-Pedal Footswitch,** one-stage

TM450 **55" 4K/3D Monitor,** screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall-mounted with VESA 200 and VESA 300 adaptors

TM009 **Signal Converter Set,** 12G-SDI – 4x 3G-SDI, for use with 55" 4K/3D Monitor TM450

TM350 **32" 4K/3D Monitor,** screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall-mounted with VESA 100 adaptor

TM440 **58" 4K Monitor,** screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall-mounted with VESA 400 x 400 and VESA 400 x 200 adaptors

TM343 **32" 4K Monitor,** screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall-mounted with VESA 100 and VESA 200 adaptors

NIR/ICG Telescopes:

26003ARA **HOPKINS® RUBINA™ 0°,** NIR/ICG, straight forward telescope 0°, enlarged view, diameter 10 mm, length 31 cm, **autoclavable,** for indocyanine green (ICG), fiber optic light transmission incorporated

26003BRA **HOPKINS® RUBINA™ 30°,** NIR/ICG, forward-oblique telescope 30°, enlarged view, diameter 10 mm, length 31 cm, **autoclavable,** for indocyanine green (ICG), fiber optic light transmission incorporated

26003FRA **HOPKINS® RUBINA™ 45°,** NIR/ICG, forward-oblique telescope 45°, enlarged view, diameter 10 mm, length 31 cm, **autoclavable,** for indocyanine green (ICG), fiber optic light transmission incorporated

26003FREA **HOPKINS® RUBINA™ 45°,** NIR/ICG, forward-oblique telescope 45°, enlarged view, diameter 10 mm, length 42 cm, **autoclavable,** for indocyanine green (ICG), fiber optic light transmission incorporated

26046ARA **HOPKINS® RUBINA™ 0°,** NIR/ICG, straight forward telescope 0°, enlarged view, diameter 5 mm, length 29 cm, **autoclavable,** for indocyanine green (ICG), fiber optic light transmission incorporated

26046BRA **HOPKINS® RUBINA™ 30°,** NIR/ICG, forward-oblique telescope 30°, enlarged view, diameter 5 mm, length 29 cm, **autoclavable,** for indocyanine green (ICG), fiber optic light transmission incorporated

26046FRA **HOPKINS® RUBINA™ 45°,** NIR/ICG, forward-oblique telescope 45°, enlarged view, diameter 5 mm, length 29 cm, **autoclavable,** for indocyanine green (ICG), fiber optic light transmission incorporated

* Also available in the following languages: DE, ES, FR, IT, PT, RU
** For use with HOPKINS® RUBINA™ NIR/ICG telescopes

OPAL1®
PDD

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
- FULL HD resolution
- 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.

TC201EN*	**IMAGE1 S CONNECT® II,** connect module, for use with up to 3 link modules, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ-SCB or KS HIVE and digital Image Processing Module, power supply 100-120 VAC/200-240 VAC, 50/60 Hz
TC301	**IMAGE1 S™ X-LINK,** link module, for use with flexible videoendoscopes 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® TC200 or IMAGE1 S CONNECT® II TC201
TH113	**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, H_2O_2 (hydrogen peroxide), focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ X-LINK
TH112	**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, H_2O_2 (hydrogen peroxide), focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ X-LINK
TM343	**32" 4K Monitor,** screen resolution 3840 x 2160, image format 16:9
TM220	**27" FULL HD Monitor,** screen resolution 1920 x 1080, image format 16:9
2033601-133	**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
20133601-1	**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
495FS	**Fluid Light Cable,** diameter 2 mm, length 220 cm
495FO	**Fluid Light Cable,** diameter 3 mm, length 180 cm
495FP	**Fluid Light Cable,** diameter 3 mm, length 250 cm
495FR	**Fluid Light Cable,** diameter 5 mm, length 250 cm
27005AIA	**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
27005BIA	**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
27005CIA	**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
2016025AIA	**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
** 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. The 3D camera platform from KARL STORZ impresses with its wide range of applications – from ENT to microsurgical interventions.

- 3D system featuring video endoscopes with a diameter of 10 millimeters (directions of view: 0°, 30°) and a diameter of 4 millimeters (directions of view: 0°, 30°, 45°) and VITOM® 3D

- Easy toggle between 3D and 2D

- Easy integration into the IMAGE1 S™ platform

- Three innovative visualization technologies for 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

TC201EN*	**IMAGE1 S CONNECT® II,** connect module, for use with up to 3 link modules, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ-SCB or KS HIVE and digital Image Processing Module, power supply 100-240 VAC, 50/60 Hz
TC302	**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® TC200 or IMAGE1 S CONNECT® II TC201
TC015	**Extension Cable IMAGE1 S D3-LINK®,** length 250 cm, to extend the video connecting cable between a videoendoscope and IMAGE1 S D3-LINK® (TC302), for use with TIPCAM®1 S 3D
7240AA3D	**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®
7240BA3D	**Same,** direction of view 30°
7240FA3D	**Same,** direction of view 45°
TH200	**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® TC302 and IMAGE1 PILOT TC014
TC014	**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 TH200
TM450	**55" 4K/3D Monitor,** screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 200 and VESA 300 adaptors
TM009	**Signal Converter Set,** 12G-SDI – 4x 3G-SDI, for use with 55" 4K/3D Monitor TM450
TM350	**32" 4K/3D Monitor,** screen resolution 3840 x 2160, image format 16:9
TM330	**32" 3D Monitor,** screen resolution 1920 x 1080, image format 16:9
TM263	**26" 3D Monitor,** screen resolution 1920 x 1080, image format 16:9
TM003	**3D Polarization Glasses,** fogless, passive, for use with 3D monitors
9800C	**3D Clip-on Glasses,** circularly polarized
TL300	**Cold Light Fountain POWER LED 300,** with integrated KARL STORZ-SCB, high-performance LED module and one KARL STORZ light outlet
495NAC	**Fiber Optic Light Cable,** with straight connector, extremely heat-resistant, with safety lock, enhanced light transmission, diameter 3.5 mm, length 230 cm
495VIT	**Fiber Optic Light Cable,** with straight connector, extremely heat-resistant, enhanced light transmission, diameter 4.8 mm, length 550 cm
39501STC	**Wire Tray for Cleaning, Sterilization and Storage** of TIPCAM®1 S 3D ORL Videoendoscopes 7240AA3D/BA3D/FA3D and one light cable, **autoclavable,** external dimensions (w x d x h): 500 x 150 x 87 mm

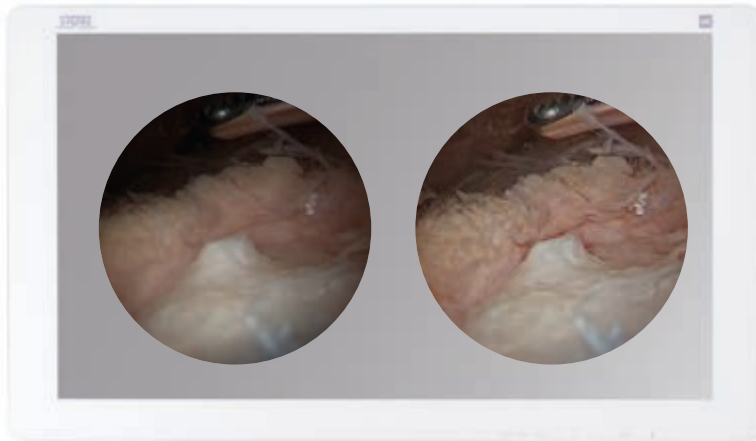* Also available in the following languages: DE, ES, FR, IT, PT, RU

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 endoscopy

- Automatic light source control

- Natural color rendition

- Three innovative visualization technologies for tissue differentiation in 2D and 3D:
  – CLARA: Homogeneous illumination
  – CHROMA: Contrast enhancement
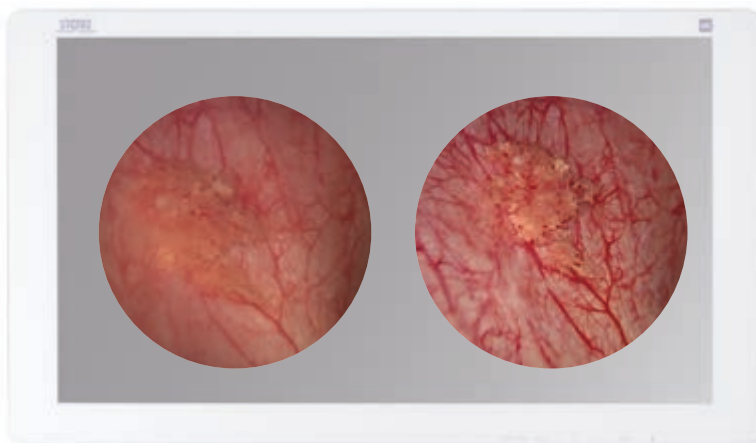 – SPECTRA*: Color shift and exchange

* 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.)

TC201EN*	**IMAGE1 S CONNECT® II,** connect module, for use with up to 3 link modules, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ-SCB or KS HIVE and digital Image Processing Module, power supply 100-240 VAC, 50/60 Hz
TC304	**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® TC200 or IMAGE1 S CONNECT® II TC201
TC302	**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® TC200 or IMAGE1 S CONNECT® II TC201
TC301	**IMAGE1 S™ X-LINK,** link module, for use with flexible videoendoscopes 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® TC200 or IMAGE1 S CONNECT® II TC201
TC300	**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® TC200 or IMAGE1 S CONNECT® II TC201
TH120	**IMAGE1 S™ One-Chip 4K UHD Camera Head,** S-Technologies available, progressive scan, soakable, EO sterilizable, H_2O_2 (hydrogen peroxide), focal length f = 18 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ 4U-LINK
TH121**	**IMAGE1 S™ 4U RUBINA™,** OPAL1® NIR/ICG, two-chip 4K UHD camera head, S-Technologies available, for NIR/ICG fluorescence imaging in combination with POWER LED RUBINA™, OPAL1® NIR/ICG, progressive scan, low-temperature sterilization, focal length f = 19 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S CONNECT® II and IMAGE1 S™ 4U-LINK
TH113	**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, H_2O_2 (hydrogen peroxide), focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ X-LINK
TH110	**IMAGE1 S™ HX One-Chip FULL HD Camera Head,** 50/60 Hz, fixed focus, progressive scan, soakable, EO sterilizable, H_2O_2 (hydrogen peroxide), focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ X-LINK
TH102	**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
TH100	**IMAGE1 S™ Three-Chip FULL HD Camera Head,** 50/60 Hz, S-Technologies available, progressive scan, soakable, EO sterilizable, H_2O_2 (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 TC300 and IMAGE 1 HUB HD/IMAGE1 HD
26606ACA	**TIPCAM®1 RUBINA™,** OPAL1® NIR/ICG, 4K/3D, high-resolution videoendoscope with two distal integrated video chips, for NIR/ICG fluorescence imaging in combination with POWER LED RUBINA™, OPAL1® NIR/ICG and Sync Connecting Cable TL006, direction of view 0°, diameter 10 mm, length 32 cm, **autoclavable,** S-Technologies available, freely programmable camera head buttons, including video connection cable, for use with IMAGE1 S CONNECT® II and IMAGE1 S™ 4U-LINK
26606BCA	**Same,** direction of view 30°

26605AA	**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™
26605BA	**Same,** direction of view 30°
7240AA3D	**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™
7240BA3D	**Same,** direction of view 30°
7240FA3D	**Same,** direction of view 45°
TH200	**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® TC302 and IMAGE1 PILOT TC014
TC014	**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 TH200
TM440	**58" 4K Monitor,** screen resolution 3840 x 2160, image format 16:9
TM343	**32" 4K Monitor,** screen resolution 3840 x 2160, image format 16:9
TM450	**55" 4K/3D Monitor,** screen resolution 3840 x 2160, image format 16:9
TM009	**Signal Converter Set,** 12G-SDI – 4x 3G-SDI, for use with 55" 4K/3D Monitor TM450
TM350	**32" 4K/3D Monitor,** screen resolution 3840 x 2160, image format 16:9
TM220	**27" FULL HD Monitor,** screen resolution 1920 x 1080, image format 16:9
TL400	**Cold Light Fountain POWER LED RUBINA™,** for NIR/ICG fluorescence imaging and standard endoscopic diagnosis, with two LEDs and one KARL STORZ light cable connection, with integrated unit communication via KS HIVE, power supply 100-125/220-240VAC, 50/60 Hz
TL300	**Cold Light Fountain POWER LED 300,** with integrated KARL STORZ-SCB, high-performance LED module and one KARL STORZ light outlet
495NCSC	**Fiber Optic Light Cable,** with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm
495NAC	**Fiber Optic Light Cable,** with straight connector, extremely heat-resistant, with safety lock, enhanced light transmission, diameter 3.5 mm, length 230 cm

* Also available in the following languages: DE, ES, FR, IT, PT, RU
** For use with HOPKINS® RUBINA™ NIR/ICG telescopes
*** Not for sale in the U.S.

with touch screen

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

TL300   **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

TL005   **Triple Adaptor,** for use with POWER LED 300 cold light fountain in conjunction with KARL STORZ, Olympus, Stryker and Wolf light cables

20090170   **SCB Connecting Cable,** length 100 cm

Further recommended products:

20161401-1   **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

TL100S1   **Cold Light Fountain CO$_2$MBI® LED SCB,** with integrated KARL STORZ-SCB, high-performance LED and integrated insufflation pump for air and CO$_2$, power supply 100-240 VAC, 50/60 Hz, for use with KARL STORZ videoendoscopes

TL400   **Cold Light Fountain POWER LED RUBINA™,** for NIR/ICG fluorescence imaging and standard endoscopic diagnosis, with two LEDs and one KARL STORZ light cable connection, with integrated unit communication via KS HIVE, power supply 100-125/220-240 VAC, 50/60 Hz

TELECAM C3 – The Camera Control Unit for Rigid, Flexible and Single-Use Endoscopy

The TELECAM C3 is a FULL HD camera control unit. Due to the possibility of connecting a wide range of diverse rigid, flexible and single-use endoscopes from KARL STORZ, it is suitable for use in almost all surgical disciplines. The TELECAM C3 can be utilized in the doctor's office as well as in the surgical environment.

- FULL HD camera control unit
- Compatible with rigid, flexible and single-use endoscopes from KARL STORZ
- Patient data entry possible
- Data storage on internal memory (up to 50 GB) or external storage medium
- Improved* menu navigation thanks to newly developed navigation interface

* In comparison to previous model

TC100EN* **TELECAM C3,** camera control unit with 2 camera inputs (X-LINE and C-LINE)
for use with flexible videoendoscopes and one-chip camera heads (up to FULL HD),
with digital Image Processing Module and USB storage option,
power supply 100-120 VAC/200-240 VAC, 50/60 Hz,
including:
Mains Cord, length 300 cm
DVI-D Connecting Cable, length 300 cm
USB Flash Drive, 32 GB
USB Silicone Keyboard, with touchpad, US

Camera Heads

TH110 **IMAGE1 S™ HX One-Chip FULL HD Camera Head,** 50/60 Hz, fixed focus, progressive scan,
soakable, gas and plasma sterilizable, focal length f = 16 mm, 2 freely programmable camera head
buttons, for use with IMAGE1 S™ X-LINK TC301, TELE PACK+ TP101 and
TELECAM C3 TC100

TH111 **IMAGE1 S™ HX-P One-Chip FULL HD Pendulum Camera Head,** 50/60 Hz, with pendulum
system and fixed focus, progressive scan, soakable, gas and plasma sterilizable, focal length
f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ X-LINK TC301,
TELE PACK+ TP101 and TELECAM C3 TC100

TH130 **H1 Camera Head,** one-chip HD camera head, progressive scan, low-temperature sterilization,
focal length f = 19 mm, 2 freely programmable camera head buttons in combination with
TELE PACK+ or TELECAM C3, for use with TELE PACK+ TP101, TELECAM C3 TC100,
C-HUB® II 20290320 and C-MAC® Monitor for CMOS Endoscopes 8403ZX

ENT Videoendoscopes

11101HD **HD Video Rhino-Laryngoscope,** direction of view 0°, angle of view 100°,
deflection up/down 140°/140°, outer diameter 3.7 mm, working length 30 cm

11102CM **CMOS Video Rhino-Laryngoscope,** direction of view 0°, angle of view 100°,
deflection up/down 140°/140°, outer diameter 2.9 mm, working length 30 cm

13303E **Video Esophagoscope,** direction of view 0°, angle of view 100°,
deflection up/down 210°/140°, outer diameter 2.9 mm, working length 75 cm

091370-01 **CMOS Video Esophagoscope SSU,** direction of view 0°, angle of view 90°, STERILE
working length 75 cm, outer diameter 3.5 mm, deflection up/down 210°/140°,
sterile, for single use, for use with E-BOX TP012, E-BOX TC028, TELE PACK+ TP101
and TELECAM C3 TC100

091330-01 **CMOS Video Rhino-Laryngoscope SSU,** direction of view 0°, angle of view 90°, STERILE
working length 30 cm, outer diameter 3.5 mm, deflection up/down 140°/140°,
sterile, for single use, for use with E-BOX TP012, E-BOX TC028, TELE PACK+ TP101
and TELECAM C3 TC100

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

Bronchoscopy Videoendoscopes

11910D   **LIVE HD Video Bronchoscope 5.5/2.0,** distal tip outer diameter 5.65 mm,
working channel diameter 2.4 x 2 mm, deflection 200°/140°, direction of view 0°,
angle of view 100°, depth of view 3-50 mm, working length 60 cm

11910T   **LIVE HD Video Bronchoscope 6.5/2.8,** distal tip outer diameter 6.5 mm,
working channel diameter 2.8 x 3 mm, deflection 180°/140°, direction of view 0°,
angle of view 100°, depth of view 3-50 mm, working length 60 cm

11910P   **LIVE Video Bronchoscope 4.2/2.0,** distal tip outer diameter 4.2 mm,
working channel diameter 2 mm, deflection 200°/145°, direction of view 0°,
angle of view 100°, depth of view 4-50 mm, working length 60 cm,

11910S   **LIVE Video Bronchoscope 3.2/1.2,** distal tip outer diameter 3.2 mm,
working channel diameter 1.2 mm, deflection 180°/130°, direction of view 0°,
angle of view 100°, depth of view 4-50 mm, working length 60 cm

10973HD   **Video Mediastinoscope,** with proximal lateral slit, length 15 cm

Urology Videoendoscopes

11272VH   **Flexible Video Cystoscope HD-VIEW®,** with positive deflection mechanism,
with suction channel and integrated light source, deflection of distal tip 210°/140°,
direction of view 0°, angle of view 100°, working channel inner diameter 7 Fr.,
sheath size 16 Fr., working length 37 cm

11272VHU   **Same,** with contrapositive deflection mechanism

11278VS   **Video Uretero-Renoscope FLEX-X^C,** steerable, compatible with IMAGE1 S™,
working channel 3.6 Fr., direction of view 0°, angle of view 90°, sheath size 8.5 Fr.,
working length 70 cm

11278VSE   **Same,** working channel with T-LUER, including case and pressure compensation cap

11278VSU   **Video Uretero-Renoscope FLEX-X^C,** steerable, compatible with IMAGE1 S™ X-LINK TC301,
with contrapositive deflection mechanism, deflection of distal tip 270°/270°, direction of view 0°,
angle of view 90°, working channel inner diameter 3.6 Fr., sheath size 8.5 Fr., working length 70 cm

11278VSUE   **Same,** working channel with T-LUER, including case and pressure compensation cap

11272VE   **CMOS Video Cysto-Urethroscope,** steerable, working channel inner diameter 7 Fr.,
direction of view 0°, angle of view 100°, sheath size 15.6 Fr., working length 37 cm

11272VUE   **Same,** with contrapositive deflection mechanism

Anesthesiology Videoendoscopes

11301ABX **Flexible Intubation Videoendoscope 3.0 x 51.5,** CMOS technology,
deflection up/down 140°/140°, direction of view 0°, angle of view 100°,
distal tip outer diameter 2.85 mm, working length 51.5 cm, total length 72 cm

11302BDX **Flexible Intubation Videoendoscope 4.0 x 65**

11303BNX **Flexible Intubation Videoendoscope 5.5 x 65,** CMOS technology, with suction valve,
deflection up/down 140°/140°, direction of view 0°, angle of view 100°, working channel inner
diameter 2.1 mm, distal tip outer diameter 5.5 mm, working length 65 cm, total length 94 cm

11304BCX **Flexible Intubation Videoendoscope 6.5 x 65,** CMOS technology, with suction valve,
deflection up/down 180°/140°, direction of view 0°, angle of view 100°, working channel inner
diameter 3 mm, distal tip outer diameter 6.3 mm, working length 65 cm, total length 94 cm

8403XXX **C-MAC® Video Laryngoscope**

091361-01 **Flexible Intubation Videoendoscope 3.5 x 65,**   STERILE
deflection up/down 180°/180°, direction of view 0°, angle of view 90°,
outer diameter 3.5 mm, working channel diameter 1.2 mm, working length 65 cm,
sterile, for single use

Surgery Videoendoscopes

11292VS **Flexible Video Choledochoscope,** steerable, deflection of distal tip 270°/270°,
direction of view 0°, angle of view 90°, working channel inner diameter 3.6 Fr./1.2 mm,
sheath size 8.5 Fr./2.8 mm, working length 50 cm,

11292VSU **Same,** with contrapositive deflection mechanism

Proctology Videoendoscopes

13912PKS TROIDL **Rectoscope,** 11.8 mm x 40 cm, flexible, color system PAL, direction of view 0°,
sheath diameter 11.8 mm, working channel diameter 3.4 mm, deflection up/down 210°/120°,
deflection left/right 120°/120°, field of view 140°, working length 40 cm

13912NKS **Same,** with color system NTSC

Gastroenterology Videoendoscopes

13820PKS **Slim Gastroscope,** SILVER SCOPE® series, color system PAL, sheath diameter 5.9 mm,
working channel diameter 2 mm, working length 1100 mm, deflection up/down 210°/100°,
deflection left/right 120°/120°, field of view 140°, depth of view 3-100 mm

13820NKS **Same,** with color system NTSC

13821PKS **Standard Gastroscope,** SILVER SCOPE® series, sheath diameter 9.3 mm,
working channel diameter 2.8 mm, working length 1100 mm, deflection up/down 210°/100°,
deflection left/right 120°/120°, field of view 140°, depth of view 2-100 mm

13821NKS **Same,** with color system NTSC

Gastroenterology Videoendoscopes

13885PKS **Duodenoscope,** SILVER SCOPE® series, color system PAL, sheath outer diameter 12.6 mm, working channel diameter 4.2 mm, working length 1260 mm, deflection up/down 120°/90°, deflection left/right 90°/110°, field of view 140°, depth of field 2-60 mm, direction of view 5° retro

13885NKS **Same,** with color system NTSC

13924PKS **Standard Colonoscope,** SILVER SCOPE® series, sheath outer diameter 12.9 mm, working channel diameter 3.8 mm, working length 1400 mm, deflection up/down 180°/180°, deflection left/right 160°/160°, field of view 160°, depth of view 2-100 mm

13924NKS **Same,** with color system NTSC

13925PKS **Standard Colonoscope,** with water jet channel diameter 1.2 mm, SILVER SCOPE® series, color system PAL, sheath outer diameter 12.9 mm, working channel diameter 3.8 mm, working length 1600 mm, deflection up/down 180°/180°, deflection left/right 160°/160°, field of view 160°, depth of view 2-100 mm

13925NKS **Same,** with color system NTSC

13823PKS **Medium Gastroscope,** SILVER SCOPE® series, color system PAL, sheath outer diameter 7.8 mm, working channel diameter 2.8 mm, working length 1100 mm, deflection up/down 210°/100°, deflection left/right 120°/120°

13823NKS **Same,** with color system NTSC

13926PKS **Slim Colonoscope,** with water jet channel, SILVER SCOPE® series, color system PAL, sheath outer diameter 11.2 mm, working channel diameter 3.4 mm, working length 1330 mm, deflection up/down 210°/180°, deflection left/right 160°/160°

13926NKS **Same,** with color system NTSC

13927PKS **Slim Colonoscope,** with water jet channel, SILVER SCOPE® series, color system PAL, sheath outer diameter 11.2 mm, working channel diameter 3.4 mm, working length 1530 mm, deflection up/down 210°/180°, deflection left/right 160°/160°, field of view 160°, depth of view 2-100 mm

13927NKS **Same,** with color system NTSC

13920PKS **Sigmoidoscope,** with water jet channel, SILVER SCOPE® series, color system PAL, sheath outer diameter 11.2 mm, working channel diameter 3.4 mm, working length 800 mm, deflection up/down 210°/180°, deflection left/right 160°/160°, field of view 160°, depth of view 2-100 mm

13920NKS **Same,** with color system NTSC

13826PKS **Interventional Gastroscope,** color system PAL, sheath outer diameter 12 mm, working channels diameter 2.8 mm and diameter 3.8 mm, working length 1100 mm, deflection up/down 210°/100°, deflection left/right 120°/120°

13826NKS **Same,** with color system NTSC

Monitors

TM220   **27" FULL HD Monitor,** screen resolution 1920 x 1080, image format 16:9,
video inputs: 2x DVI, 3G-SDI, VGA, S-Video, Composite, video outputs: DVI, 3G-SDI, Composite,
power supply 100–240 VAC, 50/60 Hz, 5 V DC output (1 A), wall mount with VESA 100 adaptor

WM100   **21.5" KARL STORZ Touch Screen,** screen resolution 1920 x 1080, image format 16:9,
video inputs: DVI-I, DVI-D, DisplayPort 1.2 compliant, VGA, Connectors: USB-B touch connector
(called "USB touch" on I/O label), RS232 (D-Sub) touch connector (called "RS232 touch" on
I/O label), RJ45 serial communication connector, power supply 100-240 VAC, 50/60 Hz,
IP protection class IPX2, touch control with latex gloves, wall mount with VESA 100 adaptor

Light Sources

TL300   **Cold Light Fountain POWER LED 300,** with integrated KARL STORZ-SCB, high-performance
LED module and one KARL STORZ light outlet, power supply 100-240 VAC, 50/60 Hz,
including:
Mains Cord

20161420-1   **Cold Light Fountain POWER LED 175 SCB,** with integrated KARL STORZ-SCB, high-performance
LED module and one KARL STORZ light outlet, power supply 100-240 VAC, 50/60 Hz,
including:
Mains Cord

TL100   **Cold Light Fountain CO$_2$MBI® LED SCB,** with high-performance LED,
integrated KARL STORZ-SCB and integrated insufflation pump for air and CO$_2$,
for use with KARL STORZ videoendoscopes, power supply 100-240 VAC, 50/60 Hz

Documentation Units

WD310   **AIDA® C,** documentation solution for recording still images and videos in FULL HD,
power supply 100-240 VAC, 50/60 Hz, power consumption 350 W,
dimensions in mm (w x h x d): 305 x 74.5 x 355

WD360   **AIDA® C Documentation System Set,** for recording still images and videos, single channel,
FULL HD and 2D
consisting of:
WD310   AIDA® C
WM200   OR1™ SMARTSCREEN®

TELE PACK+

Compact endoscopy

Imaging diagnosis is performed not only in hospitals but also, for example, in doctors' offices, day clinics or outpatient settings. Compact, flexible units with high image quality are in demand here. The new TELE PACK+ ALL-IN-ONE system from KARL STORZ meets these requirements. The system combines a monitor, LED light source, FULL HD camera control unit and documentation with integrated network function in a portable and compact unit.

- Image display in FULL HD quality
- 18.5" touch screen monitor with on-screen keyboard
- Integrated LED light source with stroboscopy function and automatic light source control
- Compatibility with rigid, flexible and single-use endoscopes from KARL STORZ
- Playback of images and video, incl. sound, of ongoing treatment
- Documentation with storage possibilities on USB memory devices and freely available internal memory of 50 GB
- Network functionality in combination with SCENARA®

TP101   **TELE PACK+,** endoscopic video unit with 2 camera inputs (X-LINE and C-LINE) for use with flexible videoendoscopes and one-chip camera heads (up to FULL HD), incl. LED light source, digital Image Processing Module with USB and network storage options as well as 18.5" FULL HD touch screen monitor, power supply 100-240 VAC, 50/60 Hz, including:
Mains Cord, length 300 cm

Camera Heads

TH110   **IMAGE1 S™ HX,** one-chip FULL HD camera head, 50/60 Hz, fixed focus, progressive scan, soakable, gas and plasma sterilizable, focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™

TH111   **IMAGE1 S™ HX-P,** one-chip FULL HD pendulum camera head, 50/60 Hz, with pendulum system and fixed focus, progressive scan, soakable, gas and plasma sterilizable, focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™

TH130   **H1 Camera Head,** one-chip HD camera head, progressive scan, low-temperature sterilization, focal length f = 19 mm, 2 freely programmable camera head buttons in combination with TELE PACK+, for use with TELE PACK+ TP101, C-HUB® II 20290320 and C-MAC® Monitor for CMOS Endoscopes 8403ZX

ENT Videoendoscopes

11101HD   **HD Video Rhino-Laryngoscope,** direction of view 0°, angle of view 100°, deflection up/down 140°/140°, outer diameter 3.7 mm, working length 30 cm

11102CM   **CMOS Video Rhino-Laryngoscope,** direction of view 0°, angle of view 100°, deflection up/down 140°/140°, outer diameter 2.9 mm, working length 30 cm

13303E   **Video Esophagoscope,** direction of view 0°, angle of view 100°, deflection up/down 210°/140°, outer diameter 2.9 mm, working length 75 cm

091370-01   **CMOS Video Esophagoscope SSU,** direction of view 0°, angle of view 90°, deflection up/down 210°/140°, outer diameter 3.5 mm, working length 75 cm, sterile, for single use, for use with E-BOX TP010 and TELE PACK+ TP101   STERILE

091330-01   **CMOS Video Rhino-Laryngoscope SSU,** direction of view 0°, angle of view 90°, deflection up/down 140°/140°, outer diameter 3.5 mm, working length 30 cm, sterile, for single use, for use with E-BOX TP010 and TELE PACK+ TP101   STERILE

Bronchoscopy Videoendoscopes

11910D	**LIVE HD Video Bronchoscope 5.5/2.0,** distal tip outer diameter 5.65 mm, working channel diameter 2.4 x 2 mm, deflection 200°/140°, direction of view 0°, angle of view 100°, depth of view 3-50 mm, working length 60 cm
11910T	**LIVE HD Video Bronchoscope 6.5/2.8,** distal tip outer diameter 6.5 mm, working channel diameter 2.8 x 3 mm, deflection 180°/140°, direction of view 0°, angle of view 100°, depth of view 3-50 mm, working length 60 cm
11910P	**LIVE Video Bronchoscope 4.2/2.0,** distal tip outer diameter 4.2 mm, working channel diameter 2 mm, deflection 200°/145°, direction of view 0°, angle of view 100°, depth of view 4-50 mm, working length 60 cm
11910S	**LIVE Video Bronchoscope 3.2/1.2,** distal tip outer diameter 3.2 mm, working channel diameter 1.2 mm, deflection 180°/130°, direction of view 0°, angle of view 100°, depth of view 4-50 mm, working length 60 cm
10973HD	**Video Mediastinoscope,** with proximal lateral slit, length 15 cm

Urology Videoendoscopes

11272VH	**Flexible Video Cystoscope HD-VIEW®,** with positive deflection mechanism, with suction channel and integrated light source, deflection of distal tip 210°/140°, direction of view 0°, angle of view 100°, working channel inner diameter 7 Fr., sheath size 16 Fr., working length 37 cm
11272VHU	**Same,** with contrapositive deflection mechanism
11278VS	**Video Uretero-Renoscope FLEX-X^c,** steerable, compatible with IMAGE1 S™, working channel 3.6 Fr., direction of view 0°, angle of view 90°, sheath size 8.5 Fr., working length 70 cm
11278VSE	**Same,** working channel with T-LUER, including case and pressure compensation cap
11278VSU	**Video Uretero-Renoscope FLEX-X^c,** steerable, compatible with IMAGE1 S™ X-LINK TC301, with contrapositive deflection mechanism, deflection of distal tip 270°/270°, direction of view 0°, angle of view 90°, working channel inner diameter 3.6 Fr., sheath size 8.5 Fr., working length 70 cm
11278VSUE	**Same,** working channel with T-LUER, including case and pressure compensation cap
11272VE	**CMOS Video Cysto-Urethroscope,** steerable, working channel inner diameter 7 Fr., direction of view 0°, angle of view 100°, sheath size 15.6 Fr., working length 37 cm
11272VUE	**Same,** with contrapositive deflection mechanism

Anesthesiology Videoendoscopes

11301ABX **Flexible Intubation Videoendoscope 3.0 x 51.5,** CMOS technology,
deflection up/down 140°/140°, direction of view 0°, angle of view 100°,
distal tip outer diameter 2.85 mm, working length 51.5 cm, total length 72 cm

11302BDX **Flexible Intubation Videoendoscope 4.0 x 65**

11303BNX **Flexible Intubation Videoendoscope 5.5 x 65,** CMOS technology, with suction valve,
deflection up/down 140°/140°, direction of view 0°, angle of view 100°,
working channel inner diameter 2.1 mm, distal tip outer diameter 5.5 mm,
working length 65 cm, total length 94 cm

11304BCX **Flexible Intubation Videoendoscope 6.5 x 65,** CMOS technology, with suction valve,
deflection up/down 180°/140°, direction of view 0°, angle of view 100°,
working channel inner diameter 3 mm, distal tip outer diameter 6.3 mm,
working length 65 cm, total length 94 cm

8403XXX **C-MAC® Video Laryngoscope**

091361-01 **Flexible Intubation Videoendoscope 3.5 x 65,** deflection up/down 180°/180°,
direction of view 0°, angle of view 90°, outer diameter 3.5 mm,
working channel diameter 1.2 mm, working length 65 cm, sterile, for single use

STERILE

Surgery Videoendoscope

11292VS **Flexible Video Choledochoscope,** steerable, deflection of distal tip 270°/270°,
direction of view 0°, angle of view 90°, working channel inner diameter 3.6 Fr./1.2 mm,
sheath size 8.5 Fr./2.8 mm, working length 50 cm

11292VSU **Same,** with contrapositive deflection mechanism
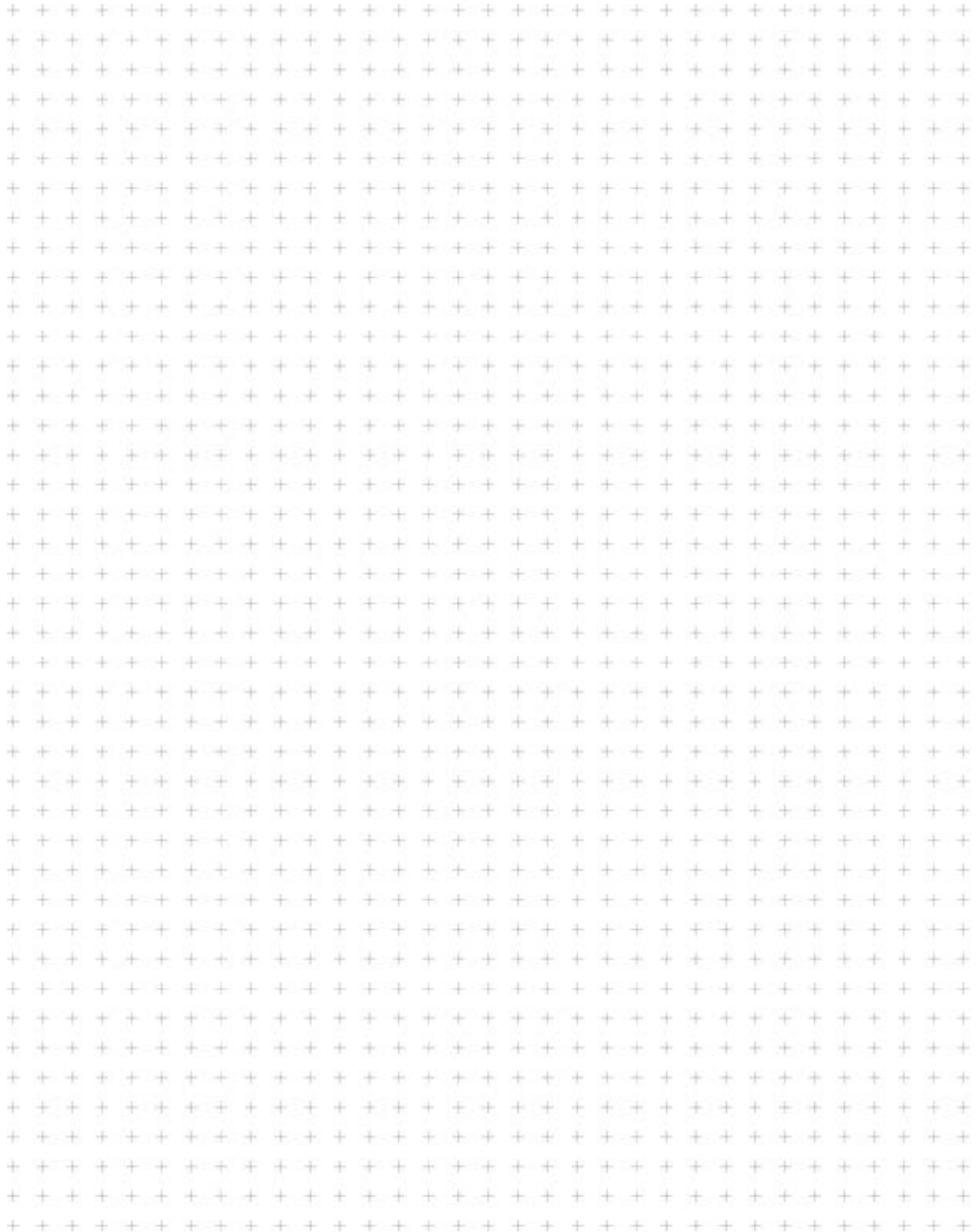
It is recommended to check the suitability of the product for the intended procedure prior to use.
Please note that the described products in this medium may not be available yet in all countries due to different regulatory requirements.

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