Highlights 2019

Otorhinolaryngology
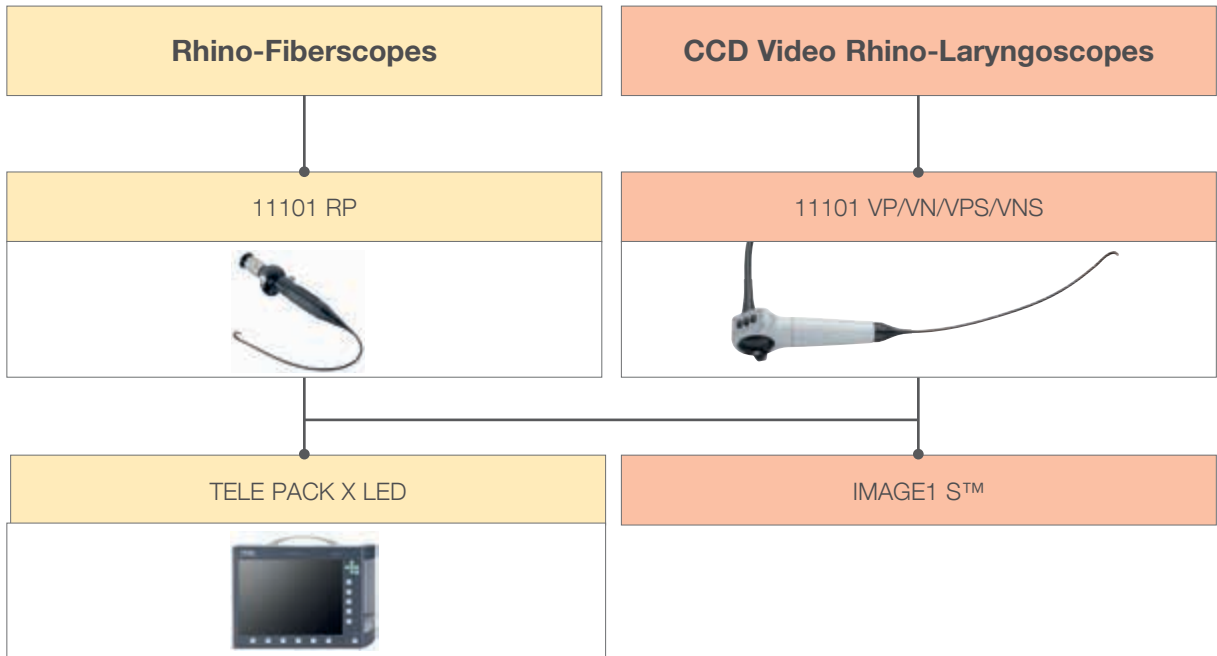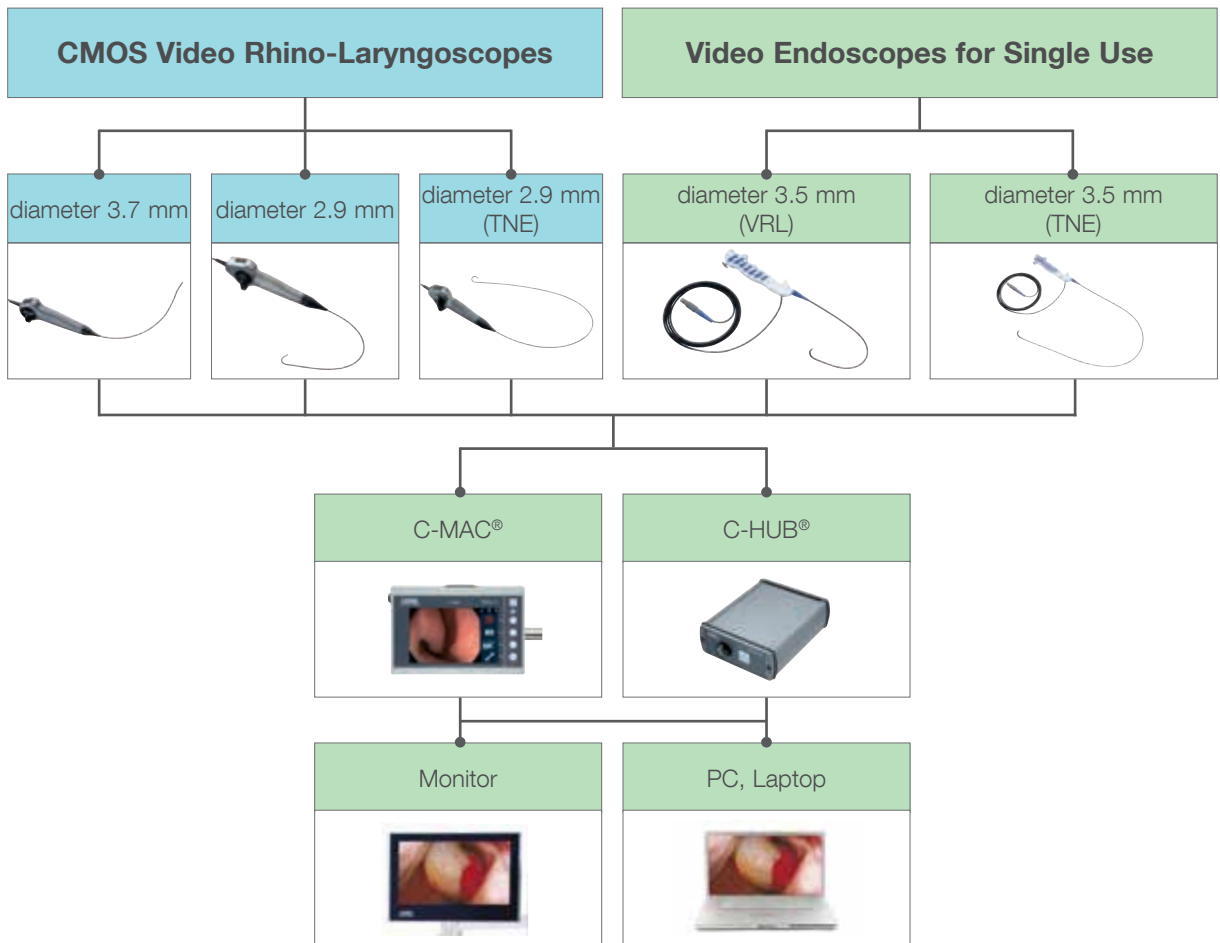

Video Diagnosis of the Upper Aerodigestive Tract
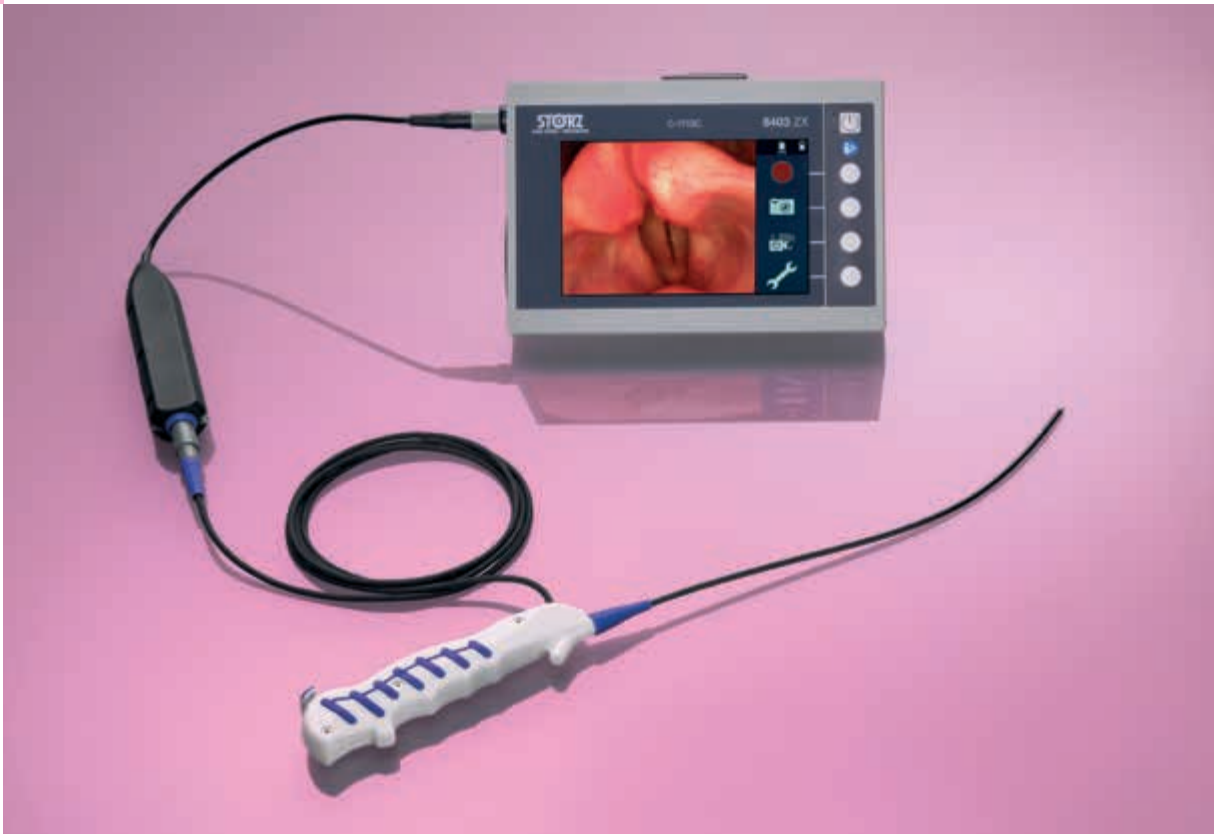
STORZ

KARL STORZ—ENDOSKOPE

Video Diagnosis of the Upper Aerodigestive Tract

Rhino-Fiberscopes	CCD Video Rhino-Laryngoscopes
11101 RP	11101 VP/VN/VPS/VNS
TELE PACK X LED	IMAGE1 S™

CMOS Video Rhino-Laryngoscopes	Video Endoscopes for Single Use

diameter 3.7 mm	diameter 2.9 mm	diameter 2.9 mm (TNE)	diameter 3.5 mm (VRL)	diameter 3.5 mm (TNE)

C-MAC®	C-HUB®

Monitor	PC, Laptop

Flexible Video Rhino-Laryngoscope for Single Use

Precise, safe, fast

Quality meets availability! Delivering performance and precision at all times is one of the main requirements of medical products. In conjunction with the E-Box and the C-MAC® monitor or C-HUB® II, the flexible single-use video endoscopes from KARL STORZ provide single-use solutions that impress in every respect.

- Excellent image quality – KARL STORZ also makes no compromises in terms of image quality when it comes to single-use products
- Ergonomic handle design allows fatigue-free work
- Integrated LED light source for optimal illumination
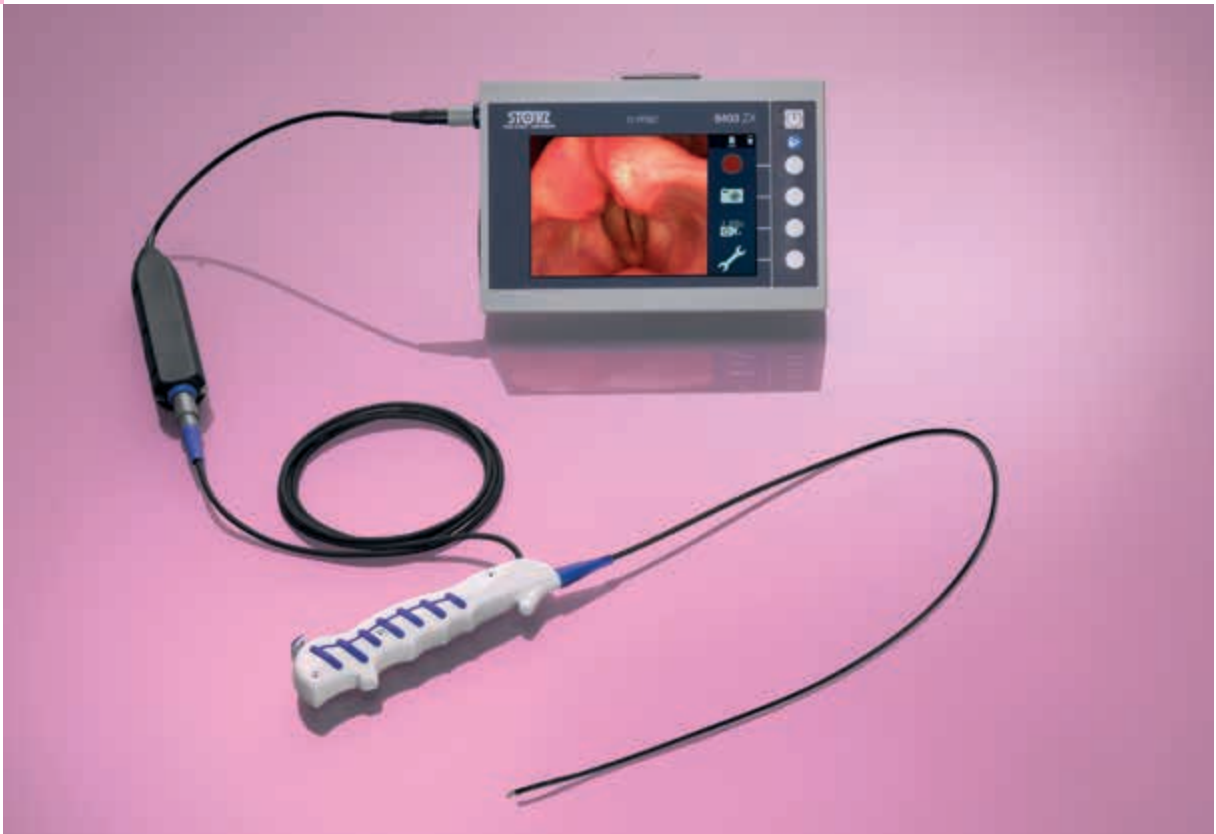- Video and image capture as well as data storage via the C-MAC® monitor

**C-MAC® Monitor 8403 ZX and E-Box TP 010, for the flexible
video rhino-laryngoscope for single use:**

8403 ZXK	**C-MAC® Monitor for CMOS Endoscopes,** set, screen size 7" with 1280 x 800 pixel resolution, two camera inputs, a USB and a HDMI port, optimized user interface, video and image capture in real time on SD card, playback of recorded video clips and still images, data transfer from SD card to USB flash drive possible, splash-proof according to IP54, suitable for wipe disinfection, shock-resistant ABS plastic housing, intelligent power management with rechargeable Li-ion batteries, VESA 75 mounting option, power adaptor for EU, UK, USA and Australia, power supply 110-240 VAC, 50/60 Hz, for use with CMOS video endoscopes including: **SD Card ULTRA,** 16 GB **Protection Cap** **VESA 75 Quick Clip** **Mains Adaptor Set**
TP 010	**E-Box,** for flexible video endoscopes for single use, compatible with C-MAC® Monitor 8403 ZX and C-HUB® II **20**2903 20
202903 01	**C-HUB® II Camera Control Unit,** for use with C-CAM® Camera Head **20**2901 32, Electronic Module 8402 X, C-MAC® Connecting Cable 8403 X or compatible CMOS video endoscopes, interfaces: USB 2.0, S-Video output (NTSC), HDMI output, power socket including: **Power Supply,** incl. country-specific plugs **S-Video (Y/C) Connecting Cable** **USB Connecting Cable** **KARL STORZ OR1™ Video Editor (USB)**

Flexible Video Rhino-Laryngoscope for Single Use:

091330-06*	**Video Rhino-Laryngoscope,** sterile, for single use, package of 6, for use with E-Box TP 010	STERILE Ⓧ
	Direction of view:	0°
	Angle of view:	90°
	Working length:	30 cm
	Outer diameter:	3.5 mm
	Deflection up/down:	140°/140°

*
mtp

Flexible Video Esophagoscope for Single Use

Precise, safe, fast

Quality meets availability! Delivering performance and precision at all times is one of the main requirements of medical products. In conjunction with the E-Box and the C-MAC® monitor or C-HUB® II, the flexible single-use video esophagoscope from KARL STORZ provides a single-use solution that impresses in every respect.

- Excellent image quality – KARL STORZ also makes no compromises in terms of image quality when it comes to single-use products
- Ergonomic handle design allows fatigue-free work
- Integrated LED light source for optimal illumination
- Video and image capture as well as data storage via the C-MAC® monitor

**C-MAC® Monitor 8403 ZX and E-Box TP 010, for the flexible
video esophagoscope for single use:**

8403 ZXK   **C-MAC® Monitor for CMOS Endoscopes,** set, screen size 7" with 1280 x 800 pixel resolution, two camera inputs, a USB and a HDMI port, optimized user interface, video and image capture in real time on SD card, playback of recorded video clips and still images, data transfer from SD card to USB flash drive possible, splash-proof according to IP54, suitable for wipe disinfection, shock-resistant ABS plastic housing, intelligent power management with rechargeable Li-ion batteries, VESA 75 mounting option, power adaptor for EU, UK, USA and Australia,
power supply 110-240 VAC, 50/60 Hz, for use with CMOS video endoscopes
including:
SD Card ULTRA, 16 GB
Protection Cap
VESA 75 Quick Clip
Mains Adaptor Set

TP 010   **E-Box,** for KARL STORZ flexible video endoscopes for single use, compatible with C-MAC® Monitor 8403 ZX and C-HUB® II **20** 2903 20

20 2903 01   **C-HUB® II Camera Control Unit,** for use with C-CAM® Camera Head **20** 2901 32, Electronic Module 8402 X, C-MAC® Connecting Cable 8403 X or compatible CMOS video endoscopes, interfaces: USB 2.0, S-Video output (NTSC), HDMI output, power socket
including:
Power Supply, incl. country-specific plugs
S-Video (Y/C) Connecting Cable
USB Connecting Cable
KARL STORZ OR1™ Video Editor (USB)

Flexible Video Esophagoscope for Single Use:

091370-06*   **Video Esophagoscope,** sterile, for single use, package of 6,   STERILE
for use with E-Box TP 010

Direction of view:	0°
Angle of view:	90°
Working length:	75 cm
Outer diameter:	3.5 mm
Deflection up/down:	210°/140°

*   mtp

CMOS Video Rhino-Laryngoscope with Diameter 2.9 mm

The new 2.9 mm CMOS video rhino-laryngoscope further expands the existing CMOS product line. The 2.9 mm video rhino-laryngoscope is particularly suitable for cramped or tight anatomical conditions. Combined with the light and mobile universal monitor, the instrument offers a fast and convenient solution.

- Integrated CMOS chip technology for excellent image quality

- 140° deflection in both directions

- Integrated LED light source for best possible illumination

- Sensitive yet robust control with ergonomic handle

- Mobility thanks to all-in-one solution – the lightweight monitor in conjunction with the CMOS video rhino-laryngoscope allows fast installation and great flexibility

11102 CMM **CMOS Video Rhino-Laryngoscope with Monitor**

Direction of view:	0°
Angle of view:	100°
Working length:	30 cm
Outer diameter:	2.9 mm
Deflection up/down:	140°/140°

20 2903 01 **C-HUB® II Camera Control Unit,** for use with C-CAM® Camera Head **20** 2901 32, Electronic Module 8402 X, C-MAC® Connecting Cable 8403 X or compatible CMOS video endoscopes, interfaces: USB 2.0, S-Video output (NTSC), HDMI output, power socket including:
Power Supply, incl. country-specific plugs
S-Video (Y/C) Connecting Cable
USB Connecting Cable
KARL STORZ OR1™ Video Editor (USB)

Further optional accessories can be found in ENDOWORLD® ENT 119 or in the current ENT catalog.

CMOS Video Esophagoscope with Diameter 2.9 mm

The CMOS product line has been expanded to include a further video endoscope with a diameter of 2.9 mm: The CMOS video esophagoscope.

Combined with the light and mobile universal monitor, this product provides a fast and convenient solution:

- CMOS chip technology for excellent image quality
- 210°/140° deflection
- Integrated LED light source for the best possible illumination
- Sensitive yet robust control with ergonomic handle
- Mobility thanks to all-in-one solution

13303 EM	**Video Esophagoscope with Monitor**	
	Direction of view:	0°
	Angle of view:	100°
	Working length:	75 cm
	Outer diameter:	2.9 mm
	Deflection up/down:	210°/140°

20 2903 01   **C-HUB® II Camera Control Unit,** for use with C-CAM® Camera Head **20** 2901 32, Electronic Module 8402 X, C-MAC® Connecting Cable 8403 X or compatible CMOS video endoscopes, interfaces: USB 2.0, S-Video output (NTSC), HDMI output, power socket including:
Power Supply, including country-specific plugs
S-Video (Y/C) Connecting Cable
USB Connecting Cable
KARL STORZ OR1™ Video Editor (USB)

CCD Video Rhino-Laryngoscope

- Excellent optical quality
- Large field of view and high mobility of the distal tip facilitate orientation
- Waterproof, fully immersible for cleaning and disinfection
- Sensitive yet stable control with ergonomic handle

11101 VP	**CCD Video Rhino-Laryngoscope,** PAL,
	including case and pressure compensation cap
	Direction of view: 0°
	Angle of view: 85°
	Working length: 30 cm
	Outer diameter: 3.7 mm
	Deflection up/down: 140°/140°

11101 VN	**CCD Video Rhino-Laryngoscope,** NTSC,
	including case and pressure compensation cap
	Direction of view: 0°
	Angle of view: 85°
	Working length: 30 cm
	Outer diameter: 3.7 mm
	Deflection up/down: 140°/140°

11101 VPS	**Strobo Video Rhino-Laryngoscope,** PAL,
	including case and pressure compensation cap
	Direction of view: 0°
	Angle of view: 85°
	Working length: 30 cm
	Outer diameter: 3.7 mm
	Deflection up/down: 140°/140°

11101 VNS	**Video Rhino-Laryngoscope,** NTSC,
	including case and pressure compensation cap
	Direction of view: 0°
	Angle of view: 85°
	Working length: 30 cm
	Outer diameter: 3.7 mm
	Deflection up/down: 140°/140°

Rhino-Fiberscopes

- Large field of view and high mobility of the distal tip facilitate orientation
- Waterproof, fully immersible for cleaning and disinfection
- Straightforward leakage testing within a few minutes without any additional equipment

11101 RP   **Rhino-Pharyngo-Laryngo-Fiberscope,**
including pressure compensation cap, leakage tester and case

Direction of view:	0°
Angle of view:	70°
Working length:	30 cm
Outer diameter:	3.5 mm
Deflection up/down:	180°/90°

11101 SK   **Rhino-Laryngo-Fiberscope,**
including pressure compensation cap, leakage tester and case

Direction of view:	0°
Angle of view:	90°
Working length:	27 cm
Outer diameter:	2.5 mm
Deflection up/down:	180°/90°

11101 SP   **Rhino-Laryngo-Fiberscope,**
including pressure compensation cap, leakage tester and case

Direction of view:	0°
Angle of view:	90°
Working length:	37 cm
Outer diameter:	2.5 mm
Deflection up/down:	180°/90°

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

The TELE PACK X LED 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

- Stroboscopy function via separate footswitch and microphone

- Archiving of still images and videos on USB flash drive, SD card or the hospital and/or practice network

- Compatible with all current rigid endoscopes and fiberscopes as well as the video rhino-laryngoscope from KARL STORZ

- 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
202120**30**	**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
202121**30**	**Same,** color system NTSC
202120**32**	**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
202121**32**	**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
200143**30**	**Two-Pedal Footswitch,** one-stage
200402**82**	**USB Flash Drive,** 32 GB
200402**81**	**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
200402**76**	**RJ-45 Network Cable,** length 100 cm
200400**76**	**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

401600**40**	**Stroboscopy Kit,** for use with TELE PACK X LED
200450**30**	**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
200450**30**	**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

STERILE

Accessories for Flexible Endoscopy

202130**70**	**Video Connecting Cable,** for use between KARL STORZ video endoscopes and TELECAM Camera Control Units (CCU) or TELE PACK video units
200450**31**	**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

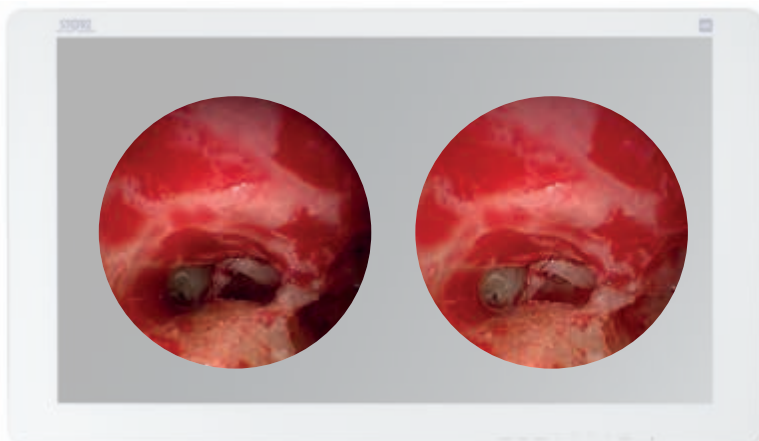* Also available in the following languages: DE, ES, FR, IT, PT, RU

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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

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

- Automatic light source control
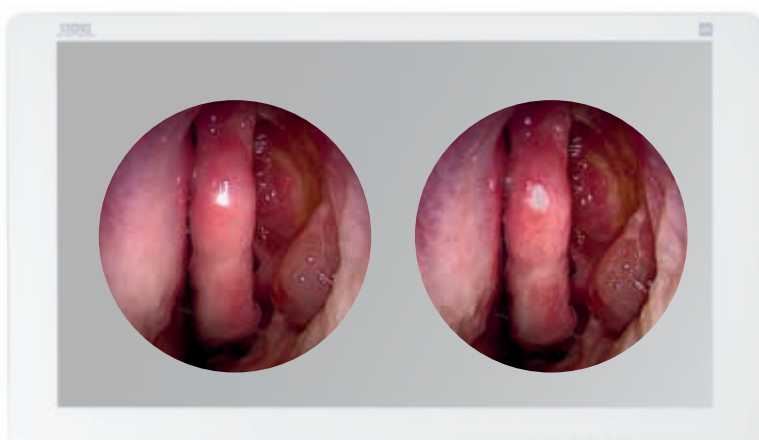
- Natural color rendition

* not for sale in the U.S.

Comparison of S-Technologies:
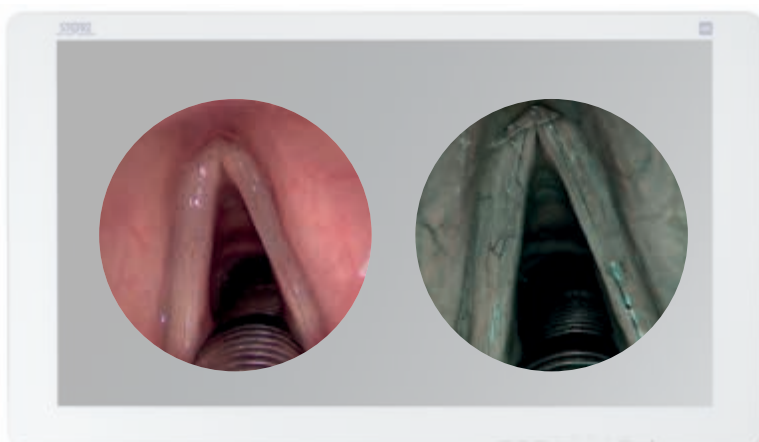
Standard image   CLARA

Standard image   CHROMA

Standard image   SPECTRA

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™ 4U One-Chip 4K UHD Camera Head,** S-Technologies available, progressive scan, soakable, EU sterilization, H_2O_2 (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 conjunction with light source D-LIGHT $^{d=\left[\frac{3.5}{3}\right]\sqrt{F}}$ or D-LIGHT C/AF, with pendulum system and fixed focus, progressive scan, soakable, EU sterilization, H_2O_2 (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, EU sterilization, H_2O_2 (hydrogen peroxide), focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™

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

TH 100   **IMAGE1 S™ H3-Z Three-Chip FULL HD Camera Head,** 50/60 Hz, S-Technologies available, progressive scan, soakable, EU sterilization, 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 TC 300 and IMAGE 1 HUB™ HD/IMAGE1 HD

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™

26605 BA   **Same,** direction of view 30°

7240 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 SCB,** 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
** TM 342 not available in USA, Japan & China
*** not for sale in the U.S.

Imaging and OR Integration

Storage and administration of image and video data	Flexible support for image sources	Centralized communication interface
SCENARA® .store	3D IMAGE1 HD 4K	SCENARA® .connect

KARL STORZ OR1™

Future-oriented integration meets innovative data management

STORZ
KARL STORZ—ENDOSKOPE
THE DIAMOND STANDARD

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www.karlstorz.com

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

www.karlstorz.com
in the Human Medicine section,
Otorhinolaryngology