

# Highlights 2019

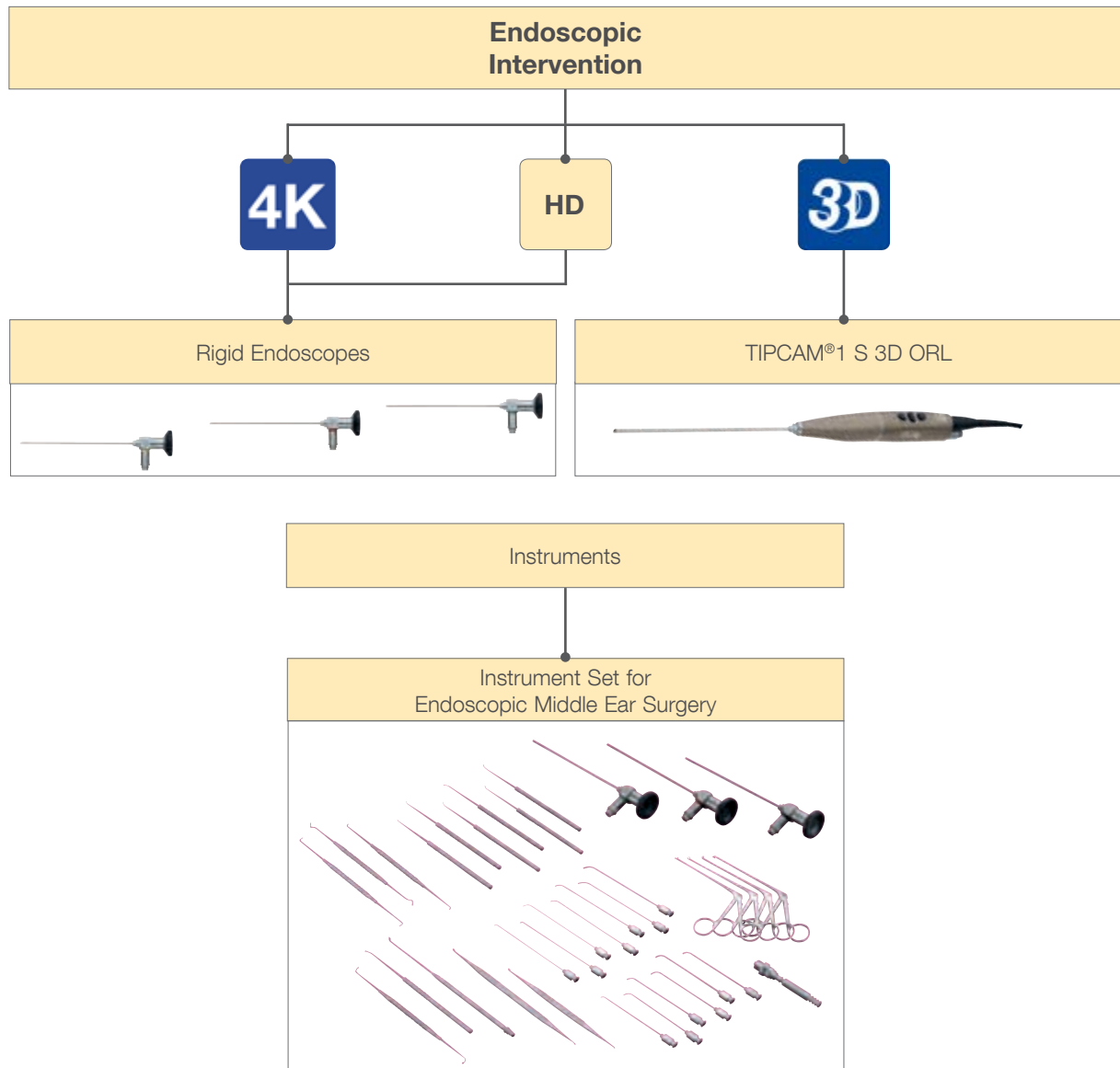
## Otorhinolaryngology

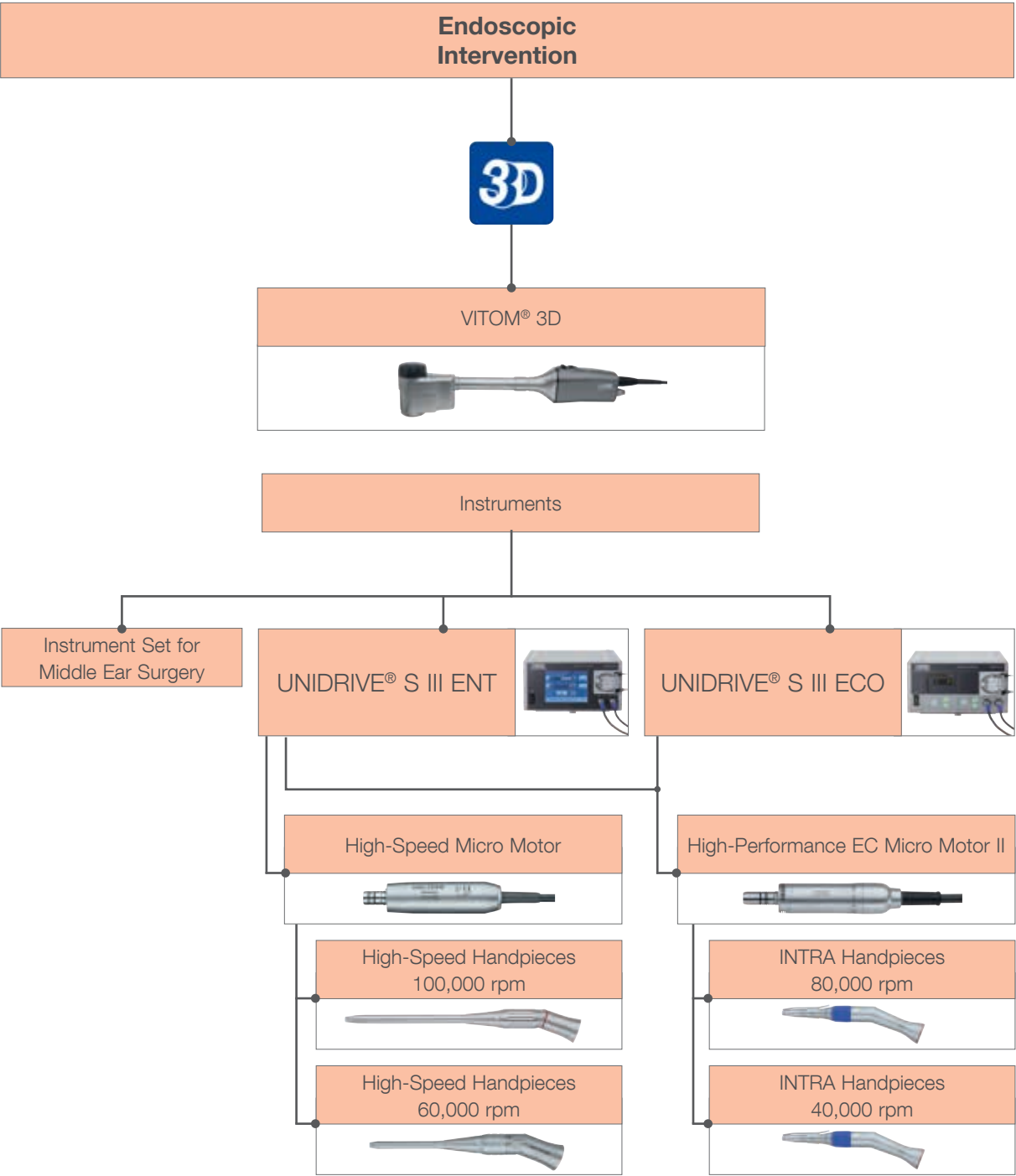


Surgical Interventions  
in the Middle Ear

**STORZ**  
KARL STORZ – ENDOSKOPE

## Surgical Interventions in the Middle Ear







## Instrument Set for Endoscopic Middle Ear Surgery

Enhanced visualization technologies in combination with the outstanding optical properties of the endoscope as well as special instruments offer new perspectives and possibilities in middle ear surgery. The following instrument set has been specially designed in order to fulfill the requirements of endoscopic ear surgery.

- Minimally invasive approach
- Allows a complete examination of the middle ear with a better control over pathologies
- Bypasses the postauricular approach
- Enables meaningful photo and video documentation

KARL STORZ offers a comprehensive set of special instruments and endoscopes. Here are the latest developments with respect to the existing instrument set:

- 224004      HOUSE **Double Curette**, medium, spoon sizes 1 x 1.6 mm and 2 x 3.5 mm, length 18 cm  
227230      **Round Knife**, diameter 3 mm, with suction, easy to handle due to rotating tube olive, length 19 cm  
226213      THOMASSIN **Dissector**, double-ended, distal tips angled 90° to right or left, length 18 cm

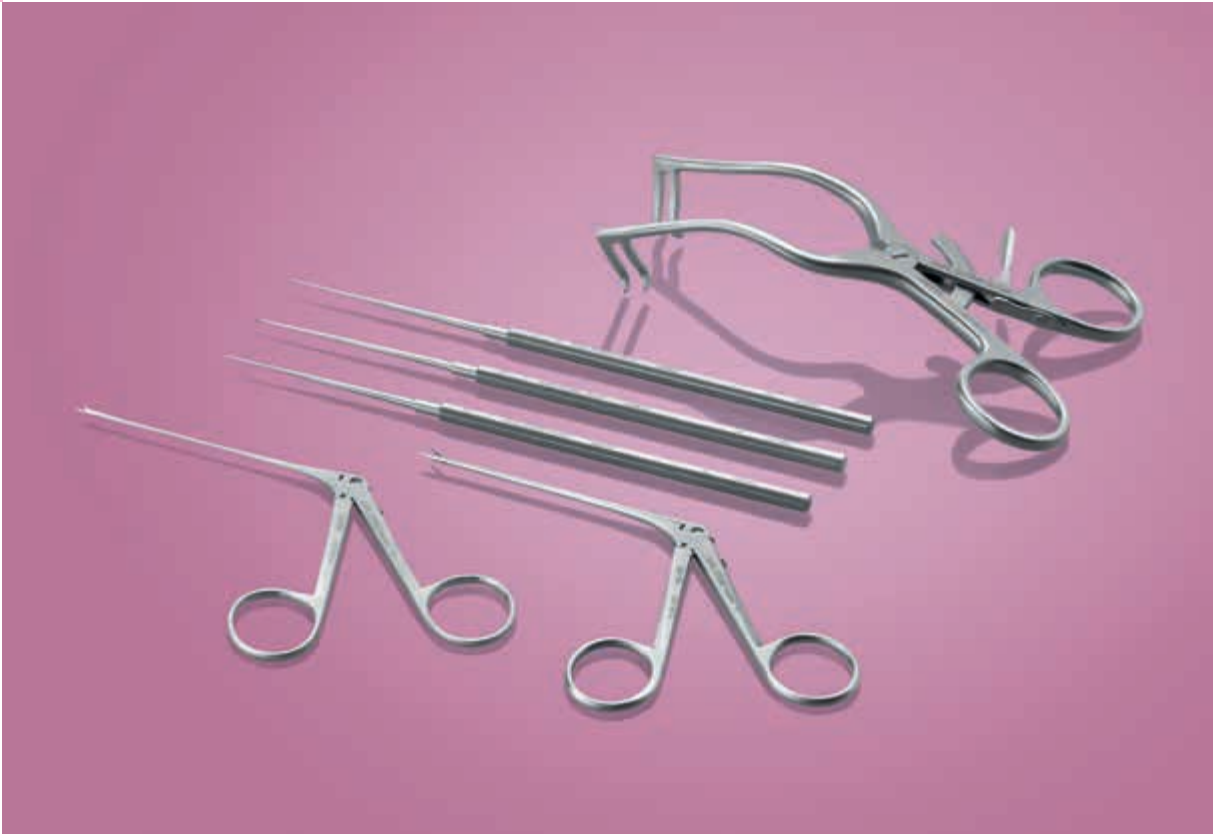
**New Conical Suction Tubes:**

- 204359 C    **Suction Tube**, conical, curved 3 mm, LUER-Lock, outer diameter 1 mm, length 8 cm  
204361 C    **Suction Tube**, conical, curved 6 mm, LUER-Lock, outer diameter 1 mm, length 8 cm  
204362 C    **Suction Tube**, conical, curved 6 mm, LUER-Lock, outer diameter 1.2 mm, length 8 cm  
204365 C    **Suction Tube**, conical, curved 8 mm, LUER-Lock, outer diameter 1.2 mm, length 8 cm  
204366 C    **Suction Tube**, conical, curved 8 mm, LUER-Lock, outer diameter 1.6 mm, length 8 cm  
204367 C    **Suction Tube**, conical, curved 6 mm, LUER-Lock, outer diameter 1.6 mm, length 8 cm

**Endoscopes with Various Directions of View:**

- 7220 AA    **HOPKINS® Straight Forward Telescope 0°**, enlarged view, diameter 3 mm, length 14 cm,  
**autoclavable**, fiber optic light transmission incorporated,  
color code: green  
7220 BA    **HOPKINS® Forward-Oblique Telescope 30°**, enlarged view, diameter 3 mm, length 14 cm,  
**autoclavable**, fiber optic light transmission incorporated,  
color code: red  
7220 FA    **HOPKINS® Forward-Oblique Telescope 45°**, enlarged view, diameter 3 mm, length 14 cm,  
**autoclavable**, fiber optic light transmission incorporated,  
color code: black  
7220 CA    **HOPKINS® Lateral Telescope 70°**, enlarged view, diameter 3 mm, length 14 cm,  
**autoclavable**, fiber optic light transmission incorporated,  
color code: yellow

**Further information on the complete set of instruments and endoscopes can be found in ENDOWORLD® ENT 137 “Instrument Set for Endoscopic Middle Ear Surgery”.**



## Instrument Set for Middle Ear Surgery

Surgery in the ear region is complex and varied as a result of the multitude of indications in this area. From tympanoplasty to cochlear implants through to routine middle ear procedures – a suitable instrument set is available for each indication.

- Standard instruments for access to the middle and inner ear
- UNIDRIVE® S III ENT motor system with a large range of handpieces
- Ancillary tools for interventions on the auditory ossicular chain and for the implantation of middle ear prostheses

2x 220213	FISCH <b>Retractor</b> , 2 x 2 prongs, length 13 cm
792003	MAYO <b>Scissors</b> , curved, length 15 cm
535312	HALSTEAD <b>“Mosquito” Artery Forceps</b> , micro model, curved, length 12.5 cm
213410	FISCH <b>Scissors</b> , extra delicate, curved, sharp/sharp, length 10.5 cm
206300	FISCH <b>Suction and Irrigation Tube</b> , conical, suction tube outer diameter 3.2 mm, irrigation tube outer diameter 2 mm, working length 9.5 cm
206600	FISCH <b>Suction and Irrigation Tube</b> , cylindrical, suction tube outer diameter 2.5 mm, irrigation tube outer diameter 2 mm, working length 9.5 cm
206700	<b>Same</b> , suction tube outer diameter 1.9 mm, irrigation tube outer diameter 1.9 mm
208000	<b>Surgical Handle</b> , Fig. 3, length 12.5 cm
211804	FISCH <b>Dual Purpose Scalpel Handle</b> , elevator on one side, scalpel handle no. 7 on the other side, length 16 cm
224003	HOUSE <b>Double Curette</b> , medium, spoon sizes 1 x 1.8 mm and 2 x 2.8 mm, length 15 cm
214500 F	<b>Jeweler Forceps</b> , fine, pointed, soft spring-action, length 11 cm
793303 F	<b>Tissue Forceps</b> , 1 x 2 teeth, slender, soft spring-action, length 13 cm
214000 F	WULLSTEIN <b>Forceps</b> , serrated, soft spring-action, length 15 cm
213011	FISCH <b>Raspatory</b> , width 10 mm, length 16 cm
477500	FREER <b>Raspatory</b> , curved, width 4 mm, length 16.5 cm
204729	FISCH <b>Suction Tube</b> , angular, with grip plate, outer diameter 1.2 mm, working length 9 cm
204730	<b>Same</b> , outer diameter 1.5 mm
204732	<b>Same</b> , outer diameter 2 mm
204733	<b>Same</b> , outer diameter 2.2 mm
204352	<b>Suction Tube</b> , angular, malleable, LUER-Lock, outer diameter 0.7 mm, working length 7 cm
204354	<b>Same</b> , outer diameter 1 mm
204250	FISCH <b>Suction Handle</b> . with cut-off hole diameter 1 mm, inner diameter 1.7 mm, LUER cone, length 5.5 cm
226101	FISCH <b>Micro Raspatory</b> , single curved to right, length 16 cm
226102	<b>Same</b> , single curved to left
226810	<b>Round Knife 45°</b> , diameter 1 mm, length 16 cm
226301	FISCH <b>Tenotome</b> , extra delicate, length 16 cm
225405	<b>Pick</b> , 45°, size 0.5 mm, length 16 cm
225410	<b>Same</b> , size 1 mm
225415	<b>Same</b> , size 1.5 mm
225425	<b>Same</b> , size 2.5 mm
225205	<b>Pick</b> , 90°, size 0.5 mm, length 16 cm
225210	<b>Same</b> , size 1 mm
225215	<b>Same</b> , size 1.5 mm
225220	<b>Same</b> , size 2 mm

226600	FISCH <b>Perforator</b> , diameter 0.3 mm, length 16 cm
226604	<b>Same</b> , diameter 0.4 mm
226605	<b>Same</b> , diameter 0.5 mm
226606	<b>Same</b> , diameter 0.6 mm
224812	FISCH <b>Footplate Hook</b> , tip angled upwards 90°, 0.2 mm, length 16 cm
224813	<b>Same</b> , tip angled downwards 90°
226514	FISCH <b>Caliper</b> , angular, diameter 0.4 mm, length 16 cm
226516	<b>Same</b> , diameter 0.6 mm
226500	FISCH <b>Measuring Rod</b> , 16 cm
221409	WULLSTEIN <b>Ear Forceps</b> , dismantling, extra delicate, oval cupped jaws, 0.9 mm, working length 8 cm
221406	<b>Same</b> , oval cupped jaws, 0.6 mm
162020	HARTMANN <b>Ear Forceps</b> , round cupped jaws, diameter 2 mm, working length 8 cm
221100	HARTMANN <b>Ear Forceps</b> , dismantling, extra delicate, serrated, 1 x 4.5 mm, working length 8 cm
221201	FISCH <b>Ear Forceps</b> , dismantling, extra delicate, serrated, 0.4 x 3.5 mm, working length 8 cm
221110	FISCH-HARTMANN <b>Ear Forceps</b> , dismantling, extra delicate, smooth, 1 x 4.5 mm, working length 8 cm
222606	FISCH-BELLUCCI <b>Micro Scissors</b> , dismantling, extra delicate scissor blades, with thin sheath, cutting length 3 mm, working length 8 cm
222603	FISCH-BELLUCCI <b>Micro Scissors</b> , dismantling, extra delicate scissor blades, cutting length 3 mm, working length 8 cm
222501	FISCH-BELLUCCI <b>Scissors</b> , dismantling, extra fine, cutting length 7 mm, working length 8 cm
222710	FISCH <b>Scissors</b> , dismantling, for crurotomy, curved to right, working length 7.5 cm
222720	<b>Same</b> , curved to left
222801	FISCH-DIETER <b>Malleus Nipper</b> , dismantling, extra delicate, upbiting, width 0.8 mm, working length 8 cm
239728	<b>Metal Tray</b> , for sterilization and storage of ear instruments, perforated, base with holder for 20 straight ear micro instruments with octagonal handle, lid with silicone bridges, external dimensions (w x d x h): 275 x 175 x 36 mm

Further instruments can be found in the ENT catalog

**Recommended Container Accessories:**

- 39502 Z      **Wire Tray for Cleaning, Sterilization and Storage** of instruments, stackable, including hole plate walls and foldaway handles, external dimensions (w x d x h): 480 x 250 x 66 mm
- 39751 A2      **Sterilization Container**, with MicroStop® microbiological barrier, for sterilization and sterile storage, external dimensions (w x d x h) 600 x 300 x 140 mm, internal dimensions: (w x d x h) 548 x 267 x 113 mm
- 39763 A2      **Coding Label**
- 39762 D2      **Color Tab**, blue



## UNIDRIVE® S III ENT

The high-end solution for comfort in the OR

One unit – six functions

- Shaver
- Sinus Burr
- High-speed Micro Motor
- High-performance EC Micro Motor II
- Micro Saw
- Dermatology

- 40701601-1 UNIDRIVE® S III ENT SCB**, motor control unit with color display, touch screen, two motor outputs, integrated irrigation pump and integrated SCB module, power supply 100-240 VAC, 50/60 Hz including:  
**Mains Cord**  
**Irrigator Rod**  
**Two-Pedal Footswitch**  
**SCB Connecting Cable**, length 100 cm  
**Single-use Tubing Set\***, sterile, package of 3

STERILE

#### Optional Accessories

- 280053 **Universal Spray**, 6x 500 ml bottles, - HAZARDOUS GOODS – UN 1950 including:  
**Spray Nozzle**
- 280053 C **Spray Nozzle**, for the reprocessing of INTRA burr handpieces, for use with Universal Spray 280053 B
- 031131-10\* **Tubing Set**, sterile, for single use, package of 10, for use with UNIDRIVE® ENT/ECO/NEURO, UNIDRIVE® S III ENT/ECO/NEURO

STERILE 



## UNIDRIVE® S III ECO

The functional and cost-effective motor system


One unit – five functions

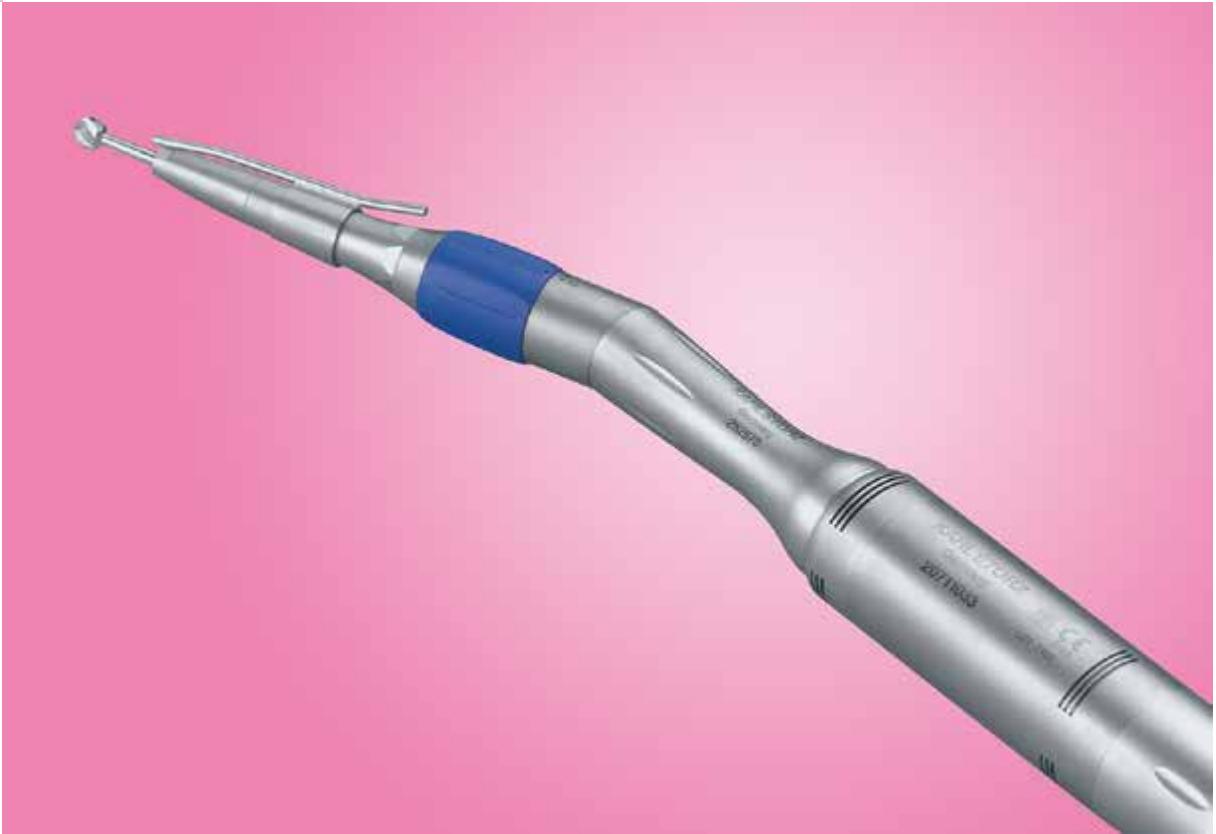
- Shaver
- Sinus Burr (12K)
- High-performance EC Micro Motor II
- Micro Saw
- Dermatome

- 40701401 UNIDRIVE® S III ECO**, motor control unit with two motor outputs and integrated irrigation pump, power supply 100-240 VAC, 50/60 Hz including:  
**Mains Cord**  
**Two-Pedal Footswitch**  
**Single-use Tubing Set\***, sterile, package of 3 STERILE

The maintenance of additional motor-driven motor components (high-performance motors, burr handpieces, shaver handpieces) must be performed with Universal Spray 280053 B + C (not included in delivery). Please order separately.

### Optional Accessories

- 280053 **Universal Spray**, 6x 500 ml bottles, – HAZARDOUS GOODS – UN 1950 including:  
**Spray Nozzle**
- 280053 C **Spray Nozzle**, for the reprocessing of INTRA burr handpieces, for use with Universal Spray 280053 B
- 031131-10\* **Tubing Set**, sterile, for single use, package of 10, STERILE   
for use with UNIDRIVE® ENT/ECO/NEURO, UNIDRIVE® S III ENT/ECO/NEURO



## High-Performance EC Micro Motor II with INTRA Drill Handpieces

- Self-cooling and brushless high-performance EC Micro Motor II
- Autoclavable and can be reprocessed in a cleaning machine
- INTRA coupling allows a wide range of applications
- Possible to adjust the number of revolutions to 80,000 rpm with the appropriate handles
- Detachable irrigation tubes
- Lightweight construction
- Low vibration

### High-Performance EC Micro Motor II

- 20711033 High-Performance EC Micro Motor II**, for use with UNIDRIVE® II/UNIDRIVE® ENT/OMFS/NEURO/ECO and Connecting Cable **20711073** or for use with UNIDRIVE® S III ENT/ECO/NEURO and Connecting Cable **20711173**
- 20711173 Connecting Cable**, to connect High-Performance EC Micro Motor II **20711033** to UNIDRIVE® S III ENT/ECO/NEURO

### INTRA Drill Handpieces, 80,000 rpm, angled

- 252573 INTRA Drill Handpiece**, angled, length 12.5 cm, transmission 1:2 (80,000 rpm)
- 252574 INTRA Drill Handpiece**, angled, length 15 cm, transmission 1:2 (80,000 rpm)
- 252575 INTRA Drill Handpiece**, angled, length 18 cm, transmission 1:2 (80,000 rpm)

### INTRA Drill Handpieces, 40,000 rpm, straight

- 252590 INTRA Drill Handpiece**, straight, length 11 cm, transmission 1:1 (40,000 rpm)
- 252591 INTRA Drill Handpiece**, straight, length 13 cm, transmission 1:1 (40,000 rpm)
- 252592 INTRA Drill Handpiece**, straight, length 17 cm, transmission 1:1 (40,000 rpm)

### INTRA Drill Handpieces, 40,000 rpm, angled

- 252571 INTRA Drill Handpiece**, angled, length 15 cm, transmission 1:1 (40,000 rpm)
- 252572 INTRA Drill Handpiece**, angled, length 18 cm, transmission 1:1 (40,000 rpm)

### Optional Accessories

- 39130 AR Cleaning Adaptor**, LUER-Lock connector, for use with INTRA and High-Speed Handpieces 2525xx, 2526xx

Suitable burr inserts can be found in the ENT catalog.



## High-Speed Micro Motor with High-Speed Drill Handpieces

### High-speed motor system for otorhinolaryngology

#### Special Features:

- Continuously variable high-speed handpieces with up to 100,000 rpm
- Easy setup and fast installation for a smooth OR workflow
- Malleable handpieces available
- Burr insert for single use

- 40701601-1 UNIDRIVE® S III ENT SCB**, motor control unit with color display, touch screen, two motor outputs, integrated irrigation pump and integrated SCB module, power supply 100-240 VAC, 50/60 Hz
- 20712033 High-Speed Micro Motor**, max. speed 60,000 rpm, including connecting cable, for use with UNIDRIVE® S III ENT/NEURO
- 252680 **High-Speed Handpiece**, short, angled, 100,000 rpm
- 252681 **High-Speed Handpiece**, medium, angled, 100,000 rpm
- 252682 **High-Speed Handpiece**, long, angled, 100,000 rpm
- 252660 **High-Speed Handpiece**, extra short, angled, 60,000 rpm
- 252661 **High-Speed Handpiece**, short, angled, 60,000 rpm
- 252662 **High-Speed Handpiece**, medium, angled, 60,000 rpm
- 252663 **High-Speed Handpiece**, long, angled, 60,000 rpm
- 252690 **High-Speed Handpiece**, extra short, straight, 60,000 rpm
- 252691 **High-Speed Handpiece**, short, straight, 60,000 rpm
- 252692 **High-Speed Handpiece**, medium, straight, 60,000 rpm
- 252671 **High-Speed Handpiece**, extra long, malleable, slim, angled, 60,000 rpm
- 252672 **High-Speed Handpiece**, super long, malleable, slim, angled, 60,000 rpm

#### Optional Accessories

- 39130 AR **Cleaning Adaptor**, LUER-Lock connector, for use with INTRA and High-Speed Handpieces 2525xx, 2526xx

Suitable burr inserts can be found in the ENT catalog.



**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*	<b>IMAGE1 S CONNECT® II</b> , 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	<b>IMAGE1 S™ 4U-LINK</b> , 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	<b>IMAGE1 S™ 4U One-Chip 4K UHD Camera Head</b> , S-Technologies available, progressive scan, soakable, EO sterilization, H <sub>2</sub> O <sub>2</sub> (hydrogen peroxide), focal length f = 18 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ 4U-LINK
TM 440	<b>58" 4K Monitor</b> , 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	<b>32" 4K 3D Monitor</b> , 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**	<b>31" 4K Monitor</b> , 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	<b>Cold Light Fountain POWER LED 300 SCB</b> , 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	<b>Fiber Optic Light Cable</b> , 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	<b>Fiber Optic Light Cable</b> , with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm
495 TIP	<b>Fiber Optic Light Cable</b> , 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



## 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:



TC 201EN*	<b>IMAGE1 S CONNECT® II</b> , 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	<b>IMAGE1 S™ 4U-LINK</b> , 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	<b>IMAGE1 S D3-LINK®</b> , 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	<b>IMAGE1 S™ X-LINK</b> , 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	<b>IMAGE1 S™ H3-LINK</b> , 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	<b>IMAGE1 S™ 4U One-Chip 4K UHD Camera Head</b> , S-Technologies available, progressive scan, soakable, EU sterilization, H <sub>2</sub> O <sub>2</sub> (hydrogen peroxide), focal length f = 18 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ 4U-LINK
TH 113	<b>IMAGE1 S™ HX-P FI One-Chip FULL HD Pendulum Camera Head</b> , 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, EU sterilization, H <sub>2</sub> O <sub>2</sub> (hydrogen peroxide), focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ X-LINK
TH 110	<b>IMAGE1 S™ HX One-Chip FULL HD Camera Head</b> , 50/60 Hz, fixed focus, progressive scan, soakable, EU sterilization, H <sub>2</sub> O <sub>2</sub> (hydrogen peroxide), focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™
TH 102	<b>IMAGE1 S™ H3-Z FI Three-Chip FULL HD Camera Head</b> , 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	<b>IMAGE1 S™ H3-Z Three-Chip FULL HD Camera Head</b> , 50/60 Hz, S-Technologies available, progressive scan, soakable, EU sterilization, H <sub>2</sub> O <sub>2</sub> (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	<b>TIPCAM®1 S 3D ORL</b> , direction of view 0°, diameter 4 mm, length 18 cm, two FULL HD image sensors, <b>autoclavable</b> , S-Technologies available, freely programmable camera head buttons, including video connecting cable, for use with IMAGE1 S™
26605 BA	<b>Same</b> , direction of view 30°
7240 FA3D	<b>Same</b> , direction of view 45°
TH 200	<b>VITOM® 3D</b> , 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	<b>IMAGE1 PILOT</b> , 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	<b>58" 4K Monitor</b> , screen resolution 3840 x 2160, image format 16:9
TM 350	<b>32" 4K/3D Monitor</b> , screen resolution 3840 x 2160, image format 16:9
TM 342**	<b>31" 4K Monitor</b> , screen resolution 3840 x 2160, image format 16:9
TM 220	<b>27" FULL HD Monitor</b> , screen resolution 1920 x 1080, image format 16:9
TL 300	<b>Cold Light Fountain POWER LED 300 SCB</b> , with integrated KARL STORZ-SCB, high-performance LED module and one KARL STORZ light outlet
495 NCSC	<b>Fiber Optic Light Cable</b> , with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm
495 NAC	<b>Fiber Optic Light Cable</b> , 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.



## VITOM® 3D – 3D Visualization for Microsurgery and Open Surgery

The VITOM® 3D system provides many surgical disciplines with a revolutionary solution for the visualization of microsurgical and open surgical interventions.

Application possibilities are similar to that of the operating microscope. The most important functions are controlled via the IMAGE1 PILOT, which is mounted on the OR table in the direct vicinity of the surgeon.

- Smaller, lighter and more compact than an operating microscope
- Lower acquisition costs and creates synergistic effects with endoscopy by using the same video tower – thus combining the benefits of endoscopy and microscopy
- Ergonomic work – the user is not confined to the eyepiece
- Improved workflow – the OR team can view the procedure in the same image quality as the surgeon


Overview

Holding Arm, for VITOM® 3D



28272 HSP

VITOM® 3D  
with integrated illuminator



TH 200

Sterile Cover for  
VITOM® 3D



TH 001\*

Fiber Optic Light Cables



495 VIT

IMAGE1 PILOT  
IMAGE1 PILOT Sterile Cover



TC 014  
041150-20\*

IMAGE1 S™ Camera System



TC 201  
TC 302

Cold Light Fountain POWER LED 300 SCB



TL 300

Holding Arm, for IMAGE1 PILOT



28272 HB  
28172 HR

3D Monitors



TM 350, TM 330

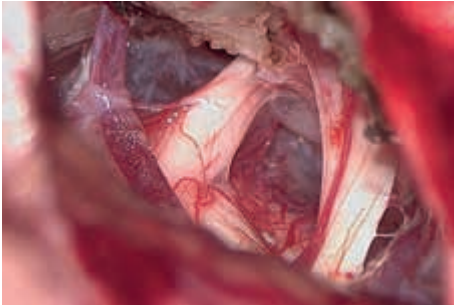
3D Polarization Glasses,  
3D Clip-on Glasses



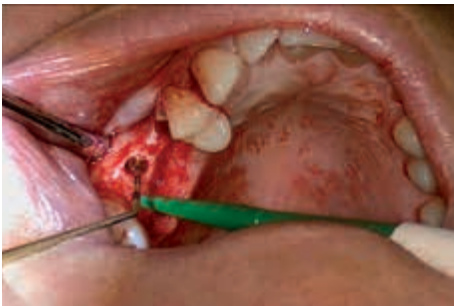
TM 003  
9800 C

## VITOM® 3D – Potential Applications

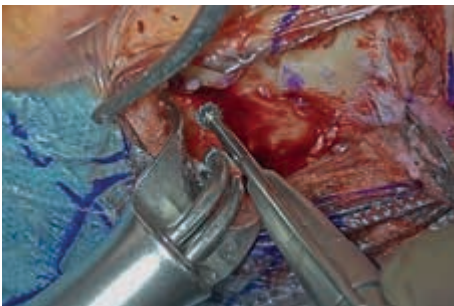
The VITOM® 3D was specifically developed for the classic applications of surgical microscopes (neurosurgery, ENT, spine surgery, hand surgery, and plastic surgery). Furthermore, it can be used in classic open surgery.



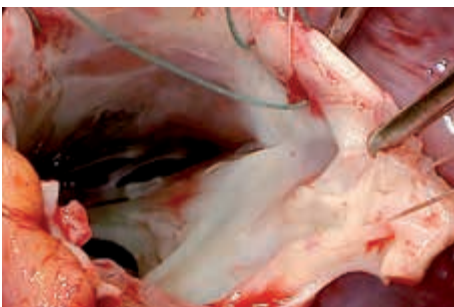
NEUROSURGERY, e.g. tumor biopsy, tumor resection, nerve decompression, intracranial bleeding, vascular surgery



ORAL AND MAXILLOFACIAL SURGERY, e.g. dysgnathia surgery, flap plasty, orbital surgery

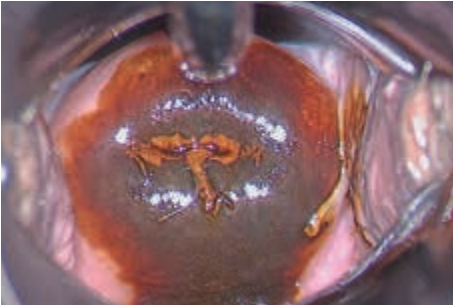


ENT, e.g. tumor resection, tympanoplasty, laryngeal surgery, adenotomy, blepharoplasty, septoplasty, open rhinoplasty, thyroplasty, thyroidectomy, eardrum paracentesis, tympanostomy tubes, cochlear implants



CARDIAC SURGERY, e.g. mitral valve surgery, pediatric cardiac surgery

Potential applications range from the visualization of the surgical field to documentation and training. The VITOM® 3D is supported by the IMAGE1 S™ camera platform and therefore offers all functions and advantages such as the S-Technologies CLARA, CHROMA, and SPECTRA\* in 2D and 3D.



GYNECOLOGY, e.g. colposcopy, conization



HAND SURGERY and PLASTIC SURGERY,  
e.g. reconstructive surgery, median nerve neurolysis,  
Dupuytren's contracture, ulnar shortening osteotomy,  
ulnar head prosthesis, arthroplasty, ganglion resection,  
correction of trigger finger and mallet finger, four-corner  
arthrodesis



SPINE SURGERY, e.g. herniated disks, spinal stenoses,  
spondylodeses, vertebral fracture



PEDIATRICS, e.g. hypospadias, anorectal malformation,  
atrial septal defect

\*not for sale in the U.S.

VITOM® 3D – 3D visualization for microsurgery and open surgery



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

**IMAGE1 PILOT is required for the use of VITOM® 3D.**  
**VITOM® 3D and IMAGE1 PILOT are always used with a holding system.**  
**Please note that special clamping jaws are required to mount VITOM® 3D to the holding system.**

**Specifications:**

Image sensor	2-chip, 4K
Zoom	infinitely variable
Working distance (WD)	20-50 cm
Magnification (WD 30 cm with 32" 3D monitor)	approx. 8-30 x
Cleaning	wipe disinfection

VERSACRANE™ holding system for the convenient positioning of VITOM®



28272 HSP **VERSACRANE™ Holding Arm**, high, mobile, spring-supported, with quick release coupling KSLOCK, for use with KARL STORZ clamping jaws.  
including:  
**Mobile Stand**, with height adjustment

**WARNING:** The **VERSACRANE™** holding arm cannot be used with rigid endoscopes!

## Accessories



28272 VTK **VITOM® 3D Clamping Jaw**, with ball joint and quick release coupling KSLOCK (male), for use with VITOM® 3D and KARL STORZ holding systems with quick release coupling KSLOCK



28272 VTP **VITOM® 3D Clamping Jaw**, for POINT SETTER, with dovetail connector, for use with VITOM® 3D and POINT SETTER holding system



495 VIT **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, enhanced light transmission, diameter 4.8 mm, length 550 cm

**Note: The 550 cm long Light Cable 495 VIT is a necessary requirement for the VERSACRANE™.**



TH 001\* **Cover**, for VITOM® 3D, sterile, for single use, package of 10



**Please note: The instruments displayed are not included in the wire tray.**



TH 002

**VITOM® 3D Illuminator**, additional lighting for VITOM® 3D, with 1 adjustable lens, **autoclavable**, for use with VITOM® 3D and light cable



TH 003

**Protective Cover**, for VITOM® 3D

#### Wire tray for reprocessing the VITOM® 3D illuminator



##### Set 2B

39502 ZH

**Wire Tray**, stackable, with hole place walls

39502 LH

**Lid**

39100 SH

**Silicone Grid Insert LARGE DIAMOND GRID**

39100 PS

**Fixation Pin**, package of 12

39360 AS

**Silicone Tie-downs**, package of 12

## IMAGE1 PILOT with holding system for fixation to the operating table



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



28172 HR **Rotation Socket**, to clamp to the operating table, with one mounted Butterfly Nut 28172 HRS, for European and US standard rails, with lateral clamp for height and angle adjustment of the articulated stand



28272 HB **Articulated Stand**, reinforced version



04 1150-20\* **Cover**, elasticated, 42 x 164 cm, sterile, for single use, package of 20, for use with KARL STORZ holding systems and IMAGE1 PILOT



## Monitor



TM 350

**32" 4K/3D Monitor**, color systems PAL/NTSC, screen resolution 3840 x 2160, image format 16:9



TM 330

**32" 3D Monitor**, color systems PAL/NTSC, screen resolution 1920 x 1080, image format 16:9



9826 SF

**Monitor Stand**, basic monitor stand, tiltable, rotation  $\pm 30^\circ$ , disinfectable, color white, with VESA 100 adaptor, for use with all monitors with VESA 100 adaptors up to 12 kg



9832 SFH

**Monitor Stand**, for professional use, height-adjustable, tiltable, rotation  $\pm 30^\circ$ , disinfectable, color white, with VESA 200 adaptor, for use with 32" monitors up to 15 kg



TM 003

**3D Polarization Glasses**, fogless, passive, for use with 3D monitors



9800 C

**3D Clip-on Glasses**, circularly polarized

## Imaging and OR Integration



Storage and  
administration of image  
and video data



SCENARA® .store

Flexible support for  
image sources



Centralized communication  
interface



SCENARA® .connect

## KARL STORZ OR1™

Future-oriented integration meets innovative  
data management

**STORZ**  
KARL STORZ — ENDOSKOPE  
THE DIAMOND STANDARD

KARL STORZ SE & Co. KG, Dr.-Karl-Storz-Straße 34, 78532 Tuttlingen/Germany  
[www.karlstorz.com](http://www.karlstorz.com)

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



[www.karlstorz.com](http://www.karlstorz.com)  
in the Human Medicine section,  
Otorhinolaryngology

**Please note that the described products in this medium may not be available yet in all countries  
due to different regulatory requirements.**

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

