Highlights 2019
Otorhinolaryngology

Surgical Interventions in the Middle Ear
Surgical Interventions in the Middle Ear

Endoscopic Intervention

4K  HD  3D

Rigid Endoscopes

TIPCAM®1 S 3D ORL

Instruments

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:

**HOUSE Double Curette**, medium, spoon sizes 1 x 1.6 mm and 2 x 3.5 mm, length 18 cm

**Round Knife**, diameter 3 mm, with suction, easy to handle due to rotating tube olive, length 19 cm

**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”.

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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
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
<td>220213</td>
<td><strong>FISCH Retractor</strong>, 2 x 2 prongs, length 13 cm</td>
</tr>
<tr>
<td>792003</td>
<td><strong>MAYO Scissors</strong>, curved, length 15 cm</td>
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<tr>
<td>535312</td>
<td><strong>HALSTEAD “Mosquito” Artery Forceps</strong>, micro model, curved, length 12.5 cm</td>
</tr>
<tr>
<td>213410</td>
<td><strong>FISCH Scissors</strong>, extra delicate, curved, sharp/sharp, length 10.5 cm</td>
</tr>
<tr>
<td>206300</td>
<td><strong>FISCH Suction and Irrigation Tube</strong>, conical, suction tube outer diameter 3.2 mm, irrigation tube outer diameter 2 mm, working length 9.5 cm</td>
</tr>
<tr>
<td>206600</td>
<td><strong>FISCH Suction and Irrigation Tube</strong>, cylindrical, suction tube outer diameter 2.5 mm, irrigation tube outer diameter 2 mm, working length 9.5 cm</td>
</tr>
<tr>
<td>206700</td>
<td><strong>Same</strong>, suction tube outer diameter 1.9 mm, irrigation tube outer diameter 1.9 mm</td>
</tr>
<tr>
<td>208000</td>
<td><strong>Surgical Handle</strong>, Fig. 3, length 12.5 cm</td>
</tr>
<tr>
<td>211804</td>
<td><strong>FISCH Dual Purpose Scalpel Handle</strong>, elevator on one side, scalpel handle no. 7 on the other side, length 16 cm</td>
</tr>
<tr>
<td>224003</td>
<td><strong>HOUSE Double Curette</strong>, medium, spoon sizes 1 x 1.8 mm and 2 x 2.8 mm, length 15 cm</td>
</tr>
<tr>
<td>214500 F</td>
<td><strong>Jeweler Forceps</strong>, fine, pointed, soft spring-action, length 11 cm</td>
</tr>
<tr>
<td>793303 F</td>
<td><strong>Tissue Forceps</strong>, 1 x 2 teeth, slender, soft spring-action, length 13 cm</td>
</tr>
<tr>
<td>214000 F</td>
<td><strong>WULLSTEIN Forceps</strong>, serrated, soft spring-action, length 15 cm</td>
</tr>
<tr>
<td>213011</td>
<td><strong>FISCH Raspatory</strong>, width 10 mm, length 16 cm</td>
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<tr>
<td>477500</td>
<td><strong>FREER Raspatory</strong>, curved, width 4 mm, length 16.5 cm</td>
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<tr>
<td>204729</td>
<td><strong>FISCH Suction Tube</strong>, angular, with grip plate, outer diameter 1.2 mm, working length 9 cm</td>
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<tr>
<td>204730</td>
<td><strong>Same</strong>, outer diameter 1.5 mm</td>
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<tr>
<td>204732</td>
<td><strong>Same</strong>, outer diameter 2 mm</td>
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<tr>
<td>204733</td>
<td><strong>Same</strong>, outer diameter 2.2 mm</td>
</tr>
<tr>
<td>204352</td>
<td><strong>Suction Tube</strong>, angular, malleable, Luer-Lock, outer diameter 0.7 mm, working length 7 cm</td>
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<tr>
<td>204354</td>
<td><strong>Same</strong>, outer diameter 1 mm</td>
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<tr>
<td>204250</td>
<td><strong>FISCH Suction Handle</strong>, with cut-off hole diameter 1 mm, inner diameter 1.7 mm, Luer cone, length 5.5 cm</td>
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<tr>
<td>226101</td>
<td><strong>FISCH Micro Raspatory</strong>, single curved to right, length 16 cm</td>
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<tr>
<td>226102</td>
<td><strong>Same</strong>, single curved to left</td>
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<tr>
<td>226810</td>
<td><strong>Round Knife 45°</strong>, diameter 1 mm, length 16 cm</td>
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<tr>
<td>226301</td>
<td><strong>FISCH Tenotome</strong>, extra delicate, length 16 cm</td>
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<tr>
<td>225405</td>
<td><strong>Pick</strong>, 45°, size 0.5 mm, length 16 cm</td>
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<tr>
<td>225410</td>
<td><strong>Same</strong>, size 1 mm</td>
</tr>
<tr>
<td>225415</td>
<td><strong>Same</strong>, size 1.5 mm</td>
</tr>
<tr>
<td>225425</td>
<td><strong>Same</strong>, size 2.5 mm</td>
</tr>
<tr>
<td>225205</td>
<td><strong>Pick</strong>, 90°, size 0.5 mm, length 16 cm</td>
</tr>
<tr>
<td>225210</td>
<td><strong>Same</strong>, size 1 mm</td>
</tr>
<tr>
<td>225215</td>
<td><strong>Same</strong>, size 1.5 mm</td>
</tr>
<tr>
<td>225220</td>
<td><strong>Same</strong>, size 2 mm</td>
</tr>
</tbody>
</table>
FISCH Perforator, diameter 0.3 mm, length 16 cm
FISCH Perforator, diameter 0.4 mm
FISCH Perforator, diameter 0.5 mm
FISCH Perforator, diameter 0.6 mm
FISCH Footplate Hook, tip angled upwards 90°, 0.2 mm, length 16 cm
FISCH Footplate Hook, tip angled downwards 90°
FISCH Caliper, angular, diameter 0.4 mm, length 16 cm
FISCH Caliper, diameter 0.6 mm
FISCH Measuring Rod, 16 cm
WULLSTEIN Ear Forceps, dismantling, extra delicate, oval cupped jaws, 0.9 mm, working length 8 cm
WULLSTEIN Ear Forceps, oval cupped jaws, 0.6 mm
HARTMANN Ear Forceps, round cupped jaws, diameter 2 mm, working length 8 cm
HARTMANN Ear Forceps, dismantling, extra delicate, serrated, 1 x 4.5 mm, working length 8 cm
HARTMANN Ear Forceps, dismantling, extra delicate, serrated, 0.4 x 3.5 mm, working length 8 cm
FISCH Ear Forceps, dismantling, extra delicate, smooth, 1 x 4.5 mm, working length 8 cm
FISCH-HARTMANN Ear Forceps, dismantling, extra delicate, 1 x 4.5 mm, working length 8 cm
FISCH-BELLUCCI Micro Scissors, dismantling, extra delicate scissor blades, with thin sheath, cutting length 3 mm, working length 8 cm
FISCH-BELLUCCI Micro Scissors, dismantling, extra delicate scissor blades, cutting length 3 mm, working length 8 cm
FISCH-BELLUCCI Scissors, dismantling, extra fine, cutting length 7 mm, working length 8 cm
FISCH Scissors, dismantling, for crurotomy, curved to right, working length 7.5 cm
FISCH-DIETER Malleus Nipper, dismantling, extra delicate, upbiting, width 0.8 mm, working length 8 cm
Metal Tray, 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

Further Accessories for Cleaning and Sterilization please see HYGIENE catalog
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
- Dermatome
40 701601-1  **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

**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**
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
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

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, 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
Surgical Interventions in the Middle Ear

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.
IMAGE1 S™ 4U – mORE than a camera

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

- IMAGE1 S™ 4U impresses with outstanding, razor-sharp images
  - Excellent image brightness
  - First-rate color rendition
  - Greater richness of detail

- Three innovative visualization technologies for tissue differentiation:
  - CLARA: Homogeneous illumination
  - CHROMA: Contrast enhancement
  - SPECTRA*: Spectral color shift and switch

- Easy integration into the IMAGE1 S™ camera platform

* not for sale in the U.S.
TC 201EN*  IMAGE1 S CONNECT® II, connect module, for use with up to 3 link modules, 4K technology, resolution 3840 x 2160 and 1920 x 1080 pixels, with integrated KARL STORZ-SCB and digital Image Processing Module, power supply 100-240 VAC, 50/60 Hz

TC 304  IMAGE1 S™ 4U-LINK, link module, for use with IMAGE1 S™ 4U camera heads, power supply 100-240 VAC, 50/60 Hz, for use with IMAGE1 S CONNECT® TC 200 or IMAGE1 S CONNECT® II TC 201

TH 120  IMAGE1 S™ 4U One-Chip 4K UHD Camera Head, S-Technologies available, progressive scan, soakable, EO sterilization, H₂O₂ (hydrogen peroxide), focal length f = 18 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ 4U-LINK

TM 440  58" 4K Monitor, screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 400 x 400 and VESA 400 x 200 adaptors

TM 350  32" 4K 3D Monitor, screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, 5V DC output (1 A), wall mount with VESA 100 adaptor

TM 342**  31" 4K Monitor, screen resolution 3840 x 2160, image format 16:9, power supply 100-240 VAC, 50/60 Hz, wall mount with VESA 100 and VESA 200 adaptors

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

495 NAC  Fiber Optic Light Cable, with straight connector, extremely heat-resistant, with safety lock, enhanced light transmission, can be used for ICG applications, diameter 3.5 mm, length 230 cm

495 NCSC  Fiber Optic Light Cable, with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm

495 TIP  Fiber Optic Light Cable, with straight connector, extremely heat-resistant, enhanced light transmission, diameter 4.8 mm, length 300 cm

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

** TM 342 not available in USA, Japan & China
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** vs. **CLARA**
- **Standard image** vs. **CHROMA**
- **Standard image** vs. **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 100-240 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, H₂O₂ (hydrogen peroxide), focal length f = 18 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ 4U-LINK

TH 113 **IMAGE1 S™ HX-P FI One-Chip FULL HD Pendulum Camera Head**, S-Technologies (CHROMA, SPECTRA*** A and B) available, OPAL® 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, H₂O₂ (hydrogen peroxide), focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ X-LINK

TH 110 **IMAGE1 S™ HX One-Chip FULL HD Camera Head**, 50/60 Hz, fixed focus, progressive scan, soakable, EU sterilization, H₂O₂ (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, H₂O₂ (hydrogen peroxide), with integrated Parfocal Zoom Lens, focal length f = 15-31 mm (2x), 2 freely programmable camera head buttons, for use with IMAGE1 S™ H3-LINK TC 300 and IMAGE 1 HUB™ HD/IMAGE1 HD

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
<table>
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<tr>
<th>Code</th>
<th>Description</th>
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<tr>
<td>TC 014</td>
<td><strong>IMAGE1 PILOT</strong>, 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</td>
</tr>
<tr>
<td>TM 440</td>
<td>58” 4K Monitor, screen resolution 3840 x 2160, image format 16:9</td>
</tr>
<tr>
<td>TM 350</td>
<td>32” 4K/3D Monitor, screen resolution 3840 x 2160, image format 16:9</td>
</tr>
<tr>
<td>TM 342**</td>
<td>31” 4K Monitor, screen resolution 3840 x 2160, image format 16:9</td>
</tr>
<tr>
<td>TM 220</td>
<td>27” FULL HD Monitor, screen resolution 1920 x 1080, image format 16:9</td>
</tr>
<tr>
<td>TL 300</td>
<td>Cold Light Fountain POWER LED 300 SCB, with integrated KARL STORZ-SCB, high-performance LED module and one KARL STORZ light outlet</td>
</tr>
<tr>
<td>495 NCSC</td>
<td>Fiber Optic Light Cable, with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm</td>
</tr>
<tr>
<td>495 NAC</td>
<td>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</td>
</tr>
</tbody>
</table>

* 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**

**Sterile Cover for VITOM® 3D**

**Fiber Optic Light Cables**

**Image 1 PILOT**

**IMAGE1 PILOT Sterile Cover**

**Image 1 S™ Camera System**

**Cold Light Fountain POWER LED 300 SCB**

**Holding Arm, for IMAGE1 PILOT**

**3D Monitors**

**3D Polarization Glasses, 3D Clip-on Glasses**

* TH 200
* TH 001
* 495 VIT
* TC 014
* TC 201
* TC 302
* TL 300
* TM 350, TM 330
* TM 003

* © KARL STORZ 96311028 ENT 1.0 03/2019/YHL-E
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:**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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<tr>
<td>Image sensor</td>
<td>2-chip, 4K</td>
</tr>
<tr>
<td>Zoom</td>
<td>infinitely variable</td>
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<tr>
<td>Working distance (WD)</td>
<td>20-50 cm</td>
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<tr>
<td>Magnification (WD 30 cm with 32&quot; 3D monitor)</td>
<td>approx. 8-30 x</td>
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<td>Cleaning</td>
<td>wipe disinfection</td>
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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

041150-20* **Cover**, elasticated, 42 x 164 cm, sterile, for single use, package of 20, for use with KARL STORZ holding systems and IMAGE1 PILOT

*STERILIZATION
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 +/-30°, 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 +/-30°, 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

KARL STORZ OR1™
Future-oriented integration meets innovative data management

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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

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.