TIPCAM®1 S 3D ORL
A Dimension Ahead
TIPCAM®1 S 3D ORL – A Dimension Ahead

With the new TIPCAM®1 S 3D ORL, KARL STORZ launches a 3D video endoscope with a small diameter of 4 millimeters on the market that impresses with brilliant 2D and 3D imaging. As part of the IMAGE1 S™ modular camera platform, existing systems can be expanded to include 3D imaging. This design is future-proof and optimally equipped for new technologies.

The 3D effect is particularly suitable for convex or hollow anatomies with fine structures such as, for example, the sphenoid cavity. Consequently, the new TIPCAM®1 S 3D ORL brings great benefits for ENT.

The KARL STORZ system provides a very good three-dimensional display of the sinuses. It is particularly useful for teaching and training sinus surgery as the surgeon has better visualization of the spatial relationships between key structures. This is of particular value for the surgeon in sinus surgery.*

The 3D system has excellent depth of view. A special advantage that I can see is that 3D is particularly useful for the rear ethmoid and sphenoid sinuses and in rhino-neurosurgery. I would start with CHROMA and, if necessary, switch over to CLARA + CHROMA for the skull base.*
At the start of surgery on a narrow anatomy I work in 2D and I then switch over to 3D. I find the third dimension particularly helpful in situations where it is necessary to detect fine structures and during resection.*

The third dimension is always helpful. In narrow, anatomic conditions, it makes sense to switch to 2D.*

The 3D effect is helpful for hollow structures. I use the CLARA + CHROMA modes as a standard setting in all interventions on the nose.*

* Testimonials from renowned ENT specialists on the new 3D video endoscope from KARL STORZ
TIPCAM®1 S 3D ORL – A Dimension Ahead

Brilliant imaging
- Clear, razor-sharp, full circular 3D and 2D images in FULL HD
- Natural color rendition
- Optimal sharpness in the working area
- Digital zoom

3D in FULL HD
- Brilliant three-dimensional display
- Enhanced haptics in the site: The third dimension simplifies precise surgery
- 3D improves the learning curve
- More patient safety

Economic efficiency and future readiness
- Part of the modular camera platform IMAGE1 S™
- Documentation in 2D via USB stick
- Easy integration of new technologies
- Forward and backward compatibility

- CLARA, CHROMA, SPECTRA* in 2D and 3D
- Visualization modes for diagnosis and therapy for clear differentiation of tissue structures
- No special equipment required (such as, for example, special light sources)
Innovative Visualization Modes

- CLARA: Homogeneous illumination
- CHROMA: Contrast enhancement
- SPECTRA*: Spectral color shift and switch

* SPECTRA A/B: Not for Sale in the U.S.
The camera platform IMAGE1 S™ 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 as well as 4K imaging is possible via the camera platform.
Modular, Economical, Future-proof

Returns on investments
• Flexible and expandable platform
• Easy-to-plan investment in components for new technologies
• Financial benefits in comparison to the new acquisition of single solutions
• Long-term and future-proof solution

For more patient safety
• A single user interface for all applications
• Standardized for all specialties
• Greater efficiency
• Greater security

Whereas non-modular imaging solutions always require significant investments each time a completely new system is acquired, KARL STORZ allows for the expansion of an existing solution. The acquisition of individual system modules reduces investment costs in the long term so that users are ideally equipped to adopt new technologies in the future.
3D Video Endoscopes

4 mm Video Endoscope

<table>
<thead>
<tr>
<th>7240 AA3D TIPCAM®1 S 3D ORL, 4 mm, 0°</th>
<th>7240 BA3D TIPCAM®1 S 3D ORL, 4 mm, 30°</th>
<th>7240 FA3D TIPCAM®1 S 3D ORL, 4 mm, 45°</th>
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<tbody>
<tr>
<td>For use with IMAGE1 S CONNECT™ + IMAGE1 S D3-LINK™</td>
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Specifications:

<table>
<thead>
<tr>
<th>Feature</th>
<th>7240 AA3D TIPCAM®1 S 3D ORL, 4 mm, 0°</th>
<th>7240 BA3D TIPCAM®1 S 3D ORL, 4 mm, 30°</th>
<th>7240 FA3D TIPCAM®1 S 3D ORL, 4 mm, 45°</th>
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<tbody>
<tr>
<td>Frame rate</td>
<td>50/60 Hz</td>
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<tr>
<td>Image sensor</td>
<td>2 Chip, FULL HD</td>
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<tr>
<td>Resolution</td>
<td>1920 x 1080 pixels</td>
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<td></td>
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<tr>
<td>Scanning method</td>
<td>progressive scan</td>
<td></td>
<td></td>
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<tr>
<td>Direction of view</td>
<td>0°</td>
<td>30°</td>
<td>45°</td>
</tr>
<tr>
<td>Outer diameter</td>
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<tr>
<td>Working length</td>
<td>175 mm</td>
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<tr>
<td>Weight</td>
<td>295 g</td>
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<tr>
<td>Cable length</td>
<td>300 cm</td>
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<tr>
<td>Cable routing</td>
<td>straight</td>
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</tr>
<tr>
<td>Camera head buttons</td>
<td>freely programmable</td>
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<tr>
<td>Reprocessing</td>
<td>autoclavable, plasma-sterilizable</td>
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<tr>
<td>S-Technologies</td>
<td>CLARA, CHROMA, SPECTRA</td>
<td></td>
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<tr>
<td>Protection class</td>
<td>CF defib</td>
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* SPECTRA: Not for Sale in the U.S.
The Perfect 3D Image Chain

7240 AA3D/BA3D/FA3D

495 ND/NAC

20161401-1/TL 300

WD 200/250

TC 200 + TC 302

9800 GF

Line-by-Line TM 330
Recommended products:

Reprocessing

39501 STC  Wire Tray for Cleaning, Sterilization and Storage of TIPCAM® 1 S 3D
Video Endoscopes 7240 AA3D/7240 BA3D and one light cable,
autoclavable, external dimensions (w x d x h): 50 x 15 x 9 cm

Modular Camera System

IMAGE1 S™

TC 200EN*  IMAGE1 S CONNECT™, connect module, for use with up to 3 link modules,
resolution 1920 x 1080 pixels, with integrated KARL STORZ-SCB and
Image Processing Module, power supply 100-120 VAC/200-240 VAC,
50/60 Hz

TC 302  IMAGE1 S D3-LINK™, link module, for use with TIPCAM® 1 S 3D,
power supply 100-120 VAC/200-240 VAC, 50/60 Hz,
for use with IMAGE1 S CONNECT™ TC 200

Also available in the following languages: DE, ES, FR, IT, PT, RU
3D Monitor and 3D Glasses

3D Monitor

TM 330 32" 3D Monitor, color systems PAL/NTSC, screen resolution 1920 x 1080, image format 16:9, power supply 100-240 VAC, 50/60 Hz, 5 VDC output (1 A), VESA 100 and VESA 200 adaptors, video inputs: 2x DVI-D, 2x 3G-SDI, VGA, S-Video, Composite, Component, video outputs: DVI-D, 2x 3G-SDI, S-Video, Composite, Component including:
- External 24 VDC Power Supply
- Mains Cord
- 3x 3D Polarization Glasses, fogless
- Cable Cover
- 4x Mounting Screws M4
- 4x Mounting Screws M6

TM 263 26" 3D Monitor, color systems PAL/NTSC, screen resolution 1920 x 1080, image format 16:9, power supply 100-240 VAC, 50/60 Hz, VESA 100 adaptor, video inputs: 2x DVI-D, 2x 3G-SDI, VGA, S-Video, Composite, Component, video outputs: DVI-D, 2x 3G-SDI, S-Video, Composite, Component including:
- External 24 VDC Power Supply
- Mains Cord
- 3x 3D Polarization Glasses, fogless
- Cable Cover
- 4x Mounting Screws M4
3D Glasses

9800 GF  **3D Polarization Glasses**, fogless, passive, package of 2, for use with 3D monitors, e.g. with 9826 NB-3D, 9832 NB-3D and 9824 NB-3D

9800 C  **3D Clip-on Glasses**, circularly polarized, for use with 3D Monitors 9824 NB-3D, 9826 NB-3D, 9832 NB-3D

Light Sources and Light Cables

Light source

20161401-1  **Cold Light Fountain Power LED 175 SCB**, with integrated KARL STORZ-SCB, high-performance LED and one KARL STORZ light outlet, power supply 110-240 VAC, 50/60 Hz

TL 300  **Cold Light Fountain Power LED 300**, with KARL STORZ-SCB and high-performance LED
### Light Cables

- **495 ND**  
  **Fiber Optic Light Cable**, with straight connector, diameter 3.5 mm, length 300 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

### Image and Video Documentation

**AIDA™ without SMARTSCREEN®**

- **WD 200-EN**  
  **AIDA™**, documentation system, for recording still images and videos, dual channel up to FULL HD, 2D/3D, power supply 100-240 VAC, 50/60 Hz

**AIDA™ with SMARTSCREEN®**

- **WD 250-EN**  
  **AIDA™ Documentation System**, for recording still images and videos, dual channel up to FULL HD, 2D/3D, including SMARTSCREEN® (touch screen), power supply 100-240 VAC, 50/60 Hz
Routing OR1™ mini
Video Image Processor Options

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<th>WUIS 2753</th>
<th>WUIS 2754</th>
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<td>DVI-D</td>
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<td>Analog inputs</td>
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<td>3G SDI</td>
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Tablet Options

WUIS 1856-01 OR1™ MINI Control Tablet, Set
10" tablet with pre-installed OR1™ MINI control application, with protective frame, ready-mounted in docking-station (VESA 75, connecting cable USB 4.5 m)
Control and voltage supply:
1x USB
Power supply:
5 VDC 2A
Dimensions in mm (w x h x d): 280 x 205 x 38
Weight in kg: 1.8

WUIS 2468 OR1™ MINI Soft- and Firmware Upgrade,
to homogenize the firmware of OR1™ MINI Video Image Processors as well as the software of OR1™ mini Control Tablets (GUI) in a mixed environment of previous and current OR1™ mini systems. The upgrade applies to one (1) system.
Note: The OR1™ MINI to be upgraded must be identified by the serial number of the respective Video Image Processor and Control Tablet in the customer order.
Intraoperative Irrigation System

7230 AS  **Suction and Irrigation Sheath 0°**, outer diameter 4.8 x 6 mm, working length 14 cm, for use with HOPKINS® Telescopes 7230 AA, 28132 AA, TIPCAM®1 S 3D 7240 AA 3D and KARL STORZ lens irrigation system CLEARVISION® II

7230 BS  **Suction and Irrigation Sheath 30°**, outer diameter 4.8 x 6 mm, working length 14 cm, for use with HOPKINS® Telescopes 7230 BA, 28132 BA, TIPCAM®1 S 3D 7240 BA 3D and KARL STORZ lens irrigation system CLEARVISION® II

UP 210  **ENDOMAT® SELECT**, suction or irrigation pump, incl. mains cord, power supply 100-240 VAC, 50/60 Hz

UP 606  **ENT/NEURO Software**, license, allows selection of the procedure “CLEARVISION®”, for use with ENDOMAT® SELECT UP 210

20 0142 30  **One-Pedal Footswitch**, digital, two-stage

031529-10  **Tubing Set for Irrigation**, CV, sterile, for single use, package of 10, for use with ENDOMAT® SELECT UP 210

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