Highlights 2019
Anesthesiology and Emergency Medicine
Airway Management Solutions

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Versatility

Airway management is not confined to a specific location. In ORs, emergency rooms, intensive care units through to prehospital emergency settings, medical practitioners are often confronted with the challenges of a difficult airway. KARL STORZ offers mobile and optimal solutions for managing difficult airway situations wherever and whenever they occur.

Solutions to meet your needs

Single-use or reusable? KARL STORZ provides solutions that meet specific customer needs in airway management. The C-MAC® system is thereby the perfect platform.
Semiflexible Endoscopy

C-MAC® VS

Retromolar Intubation Endoscope 2.0

For the greatest challenges

Spinal injuries, trauma patients, maxillofacial injuries – you can count on KARL STORZ to help you master the most difficult airway situations. We are the only company to offer such a comprehensive range of endoscopic solutions for difficult airway management.
The New C-MAC® FIVE S

Excellent image quality for the most exacting requirements – the premium class in single-use endoscopy

The new single-use FIVE S (Flexible Intubation Video Endoscope) from KARL STORZ offers a single-use solution that is impressive in every respect. Its compatibility to the multifunctional C-MAC® monitor and the excellent image quality of the FIVE product family allows the new FIVE S to be perfectly integrated into the existing C-MAC® system.

- Together with the C-MAC® S video laryngoscopes, the C-MAC® system is now a complete single-use platform with the best possible image quality
- Optimal maneuverability thanks to the special, ergonomic sheath design with outstanding rigidity
- Exceptionally good gliding properties, particularly when using the endotracheal tube
- Sterile packaging ensures constant availability
- Workflows gain flexibility and speed as they no longer need to be adapted to product availability
091361-06* **Intubation Video Endoscope 3.5 x 65**, direction of view 0°, angle of view 90°, working length 65 cm, outer diameter 3.5 mm, working channel diameter 1.2 mm, deflection up/down 180°/180°, sterile, for single use, package of 6, for use with E-Box TP 010

091261-06* **Flexible Intubation Video Endoscope 3.0 x 65**, direction of view 0°, angle of view 90°, working length 65 cm, outer diameter 2.9 mm, working channel diameter 1.2 mm, deflection up/down 180°/180°, sterile, for single use, package of 6, for use with E-Box TP 010

091251-06* **Flexible Intubation Video Endoscope 3.0 x 52**, direction of view 0°, angle of view 90°, working length 52 cm, outer diameter 2.9 mm, working channel diameter 1.2 mm, deflection up/down 180°/180°, sterile, for single use, package of 6, for use with E-Box TP 010

TP 010 **E-Box**, for flexible video endoscopes for single use, compatible with C-MAC® Monitor 8403 ZXK and C-HUB® II 20290320

8403 ZXK **C-MAC® Monitor for CMOS Endoscopes**, 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**
The New C-MAC® FIVE 6.5

The future gold standard – the premium class for the intensive care unit

The new FIVE 6.5 (Flexible Intubation Video Endoscope) was specially developed for use in the intensive care unit. It is suitable for applications such as airway inspection and the suction of bronchial mucus as well as foreign body removal and biopsies. Its compatibility to the multifunctional C-MAC® monitor and the excellent image quality of the FIVE product family allows the new FIVE 6.5 for the intensive care unit to be perfectly integrated into the existing C-MAC® system.

- Possible to switch to an alternative endoscope within seconds: Plan B is always at the ready
- Large working channel of 3 mm
- Ergonomic design for optimal maneuverability
- Acoustic and tactile zero position control
- Exceptional user performance
- Completely mobile, compact and space-saving, particularly in the intensive care unit
Flexible Intubation Video Endoscope Set 6.5 x 65, CMOS technology, with suction valve, direction of view 0°, angle of view 100°, working length 65 cm, total length 94 cm, working channel inner diameter 3 mm, distal tip outer diameter 6.5 mm, deflection up/down 180°/140°, for use with C-MAC® Monitor 8403 ZXK and C-HUB® II 20290301 including:

- Flexible Intubation Video Endoscope 6.5 x 65
- Case
- Pressure Compensation Cap
- Leakage Tester
- Tube Holder
- Cleaning Brush
- 2x Irrigation Adaptors
- Suction Valve
- Bronchoscope Insertion Tube, size 4, sterile
- Bronchoscope Insertion Tube, size 2, sterile
- Plug
- Protection Cap
- Protective Film

C-MAC® Monitor for CMOS Endoscopes, 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
The New C-MAC® VS Video Stylet

Redefine your limits

The new C-MAC® VS is a completely new type of video endoscope. Thanks to its semiflexible sheath and deflectable tip, it combines the advantages of both rigid intubation telescopes and flexible intubation endoscopes. Its design is similar to that of the retromolar intubation endoscope, which is of particular benefit for the unexpected difficult airway.

- Lever with patented deflection mechanism and passive return
- BlueButton: Documentation with the innovative multifunction button
- Simple Plug & Play thanks to the universal C-MAC® system interface
- Compatible with the C-MAC® III monitor, C-MAC® PM II and C-HUB® II
- Excellent image quality due to the high-resolution chip at the distal end
- The ideal airway endoscope for the emergency room or particularly difficult intubations
10331 BXK  C-MAC® VS, Set, rigid intubation video endoscope, with deflectable tip, CMOS technology, with C-MAC® system interface, documentation of images and video sequences via BlueButton, deflection up/down 60°/0°, direction of view 0°, angle of view 100°, working length 41 cm, total length 60 cm, distal tip outer diameter 5.5 mm, for use with C-MAC® Connecting Cable 8403 X for C-MAC® Monitor 8403 ZXK or C-HUB® II 20 2903.01 as well as C-MAC® PM 8403 XD

The following accessories are included in delivery:

- C-MAC® VS Leakage Tester
- Tube Holder, for tube fixation, with O₂ application

8403 ZXK  C-MAC® Monitor for CMOS Endoscopes, 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

8403 X  C-MAC® Connecting Cable, with C-MAC® system interface, for C-MAC® Monitor 8403 ZX or C-HUB® II 20 2903.01, length 200 cm, for use with C-MAC® Video Laryngoscopes 8403 xxx

8403 XDK  C-MAC® PM Set, unit with LCD monitor and power supply for all C-MAC® video laryngoscopes, with C-MAC® system interface, screen size 3.5”, documentation of images and video sequences saved on internal memory, monitor movable via two rotation axes, rechargeable Li-Ion battery, 1 h operation time, exchangeable battery pack, 2 h charging time, power management with capacity indicator, protection class IPX8, for use with C-MAC® Video Laryngoscopes 8403 xxx,

including:
- C-MAC® PM Battery, rechargeable
- USB Data Cable
- Protection Cap, for reprocessing

8403 XDL  Charging Unit, for one rechargeable battery for C-MAC® PM, with power supply and mains adaptor for EU, UK, USA and AUS, power supply 100-240 VAC, 50/60 Hz, suitable for wipe disinfection, for use with Battery 8403 XDA and C-MAC® PM 8403 XD
C-MAC® S – The Video Laryngoscope for Single Use that Meets the Highest Hygiene Standards

The C-MAC® S video laryngoscope has the same outstanding features and all the familiar benefits of the reusable C-MAC® video laryngoscopes while meeting the highest hygiene standards. In contrast to other video laryngoscopes for single use, the blade and handle form one continuous piece which significantly reduces the danger of cross-contamination, even in the case of high-risk patients. The ergonomically designed IMAGER can be reprocessed at temperatures up to 65 °C and thus completes the hygiene chain. In line with ISO 7376 standards, the C-MAC® S video laryngoscope features high tensile strength and is extremely robust.

Special Features:

- Blade and handle form one continuous piece: Optimum protection against cross-contamination
- IMAGER can be reprocessed with HLD and with mechanical cleaning up to 65 °C
- Three blade types: MACINTOSH #3, #4 and D-BLADE with short handle
- Extremely sturdy plastic material with high tensile strength
- Compatible with C-MAC® III Monitor, C-MAC® PM II and C-HUB® II
- Ergonomic handle and IMAGER
C-MAC® S IMAGER, with C-MAC® system interface, for manual and machine disinfection up to 65 °C and High Level Disinfection (HLD) acc. to US standards, for use with C-MAC® Connecting Cable 8403 X, C-MAC® Monitor 8403 ZX, C-MAC® PM 8403 XD or C-HUB® II 20 290301 and single-use C-MAC® S Video Laryngoscopes 051113-10, 051114-10, 051116-10

C-MAC® S Video Laryngoscope MAC #3,
with MACINTOSH laryngoscope blade, size 3, for single use, package of 10,
for use with C-MAC® S IMAGER 8402 XS, 8403 XS or 8403 XSI

C-MAC® S Video Laryngoscope MAC #4,
with MACINTOSH laryngoscope blade, size 4, for single use, package of 10,
for use with C-MAC® S IMAGER 8402 XS, 8403 XS or 8403 XSI

C-MAC® S Video Laryngoscope D-BLADE,
with laryngoscope blade for difficult intubation, for single use, package of 10,
for use with C-MAC® S IMAGER 8402 XS, 8403 XS or 8403 XSI

C-MAC® PM Set, unit with LCD monitor and power supply for all C-MAC® video laryngoscopes, with C-MAC® system interface, screen size 3.5", documentation of images and video sequences saved on internal memory, monitor movable via two rotation axes, rechargeable Li-Ion battery, 1 h operation time, exchangeable battery pack, 2 h charging time, power management with capacity indicator, protection class IPX8, for use with C-MAC® Video Laryngoscopes 8403 xxx including:

C-MAC® PM
Battery, rechargeable
USB Data Cable
Protection Cap, for reprocessing

Charging Unit, for one rechargeable battery for C-MAC® PM, with power supply and mains adaptor for EU, UK, USA and AUS, power supply 100-240 VAC, 50/60 Hz, suitable for wipe disinfection, for use with Battery 8403 XDA and C-MAC® PM 8403 XD

Battery, rechargeable Li-Ion battery for power supply of C-MAC® PM 8403 XD, charging via Charging Unit 8403 XDL, optimal operation time of 60 min, suitable for wipe disinfection
Retromolar Intubation Endoscope 2.0
The thinnest member of the C-MAC® product family

Children are not small adults. Anatomical differences, and possibly specific pathologies, of children and infants make airway management difficult for the inexperienced intubator. This is why we incorporated the 2.0 intubation endoscope with eyepiece into the C-MAC® product family. It can be easily connected to the C-MAC® monitor by means of the C-CAM®. The retromolar intubation endoscope is an expert tool for airway management in pediatric patients.

- For difficult airways in children and newborns
- Suitable for ET tubes with inner diameters ranging from 2.5 to 3.5 mm
- Continuous oxygen insufflation via the tube holder ensures additional safety
- Video-assisted intubation when using C-CAM® and a mobile light source in conjunction with the C-MAC® III monitor or C-HUB® II
Intubation Endoscope Set, with eyepiece, outer diameter 2 mm, for ETT 2.5-3.5 mm, working length 22 cm, distal bending 40°, angle of view 80°, for use with LED Battery Light Sources (11301 D1, D3, D4, DE, DF), 8-pin C-CAM® Camera Head 20290132 including:

Intubation Endoscope 2.0 x 22 Case
Tube Holder, for tube fixation, with O₂ application

Battery Light Source LED for Endoscopes, with fine screw thread, boost mode for temporary increase in brightness, burning time > 120 min, weight approx. 78 g, for use with KARL STORZ endoscopes

Tube Holder, for tube fixation, with O₂ application

Battery Light Source LED for Endoscopes, rechargeable, with click connection, boost mode for temporary increase in brightness, color temperature 5500 K, lithium-ion batteries, charging time 60 min, burning time at 100% brightness 40 min, weight approx. 150 g, suitable for wipe disinfection

Battery Light Source LED for Endoscopes, rechargeable, with click connection, boost mode for temporary increase in brightness, color temperature 5500 K, lithium-ion batteries, charging time 60 min, burning time at 100% brightness 40 min, weight approx. 150 g, suitable for wipe disinfection

Battery Light Source LED for Endoscopes, rechargeable, with click connection, boost mode for temporary increase in brightness, color temperature 5500 K, lithium-ion batteries, charging time 60 min, burning time at 100% brightness 40 min, weight approx. 150 g, suitable for wipe disinfection

Charging Unit, for two LED battery light sources, with fixed integrated power supply and adaptor for EU, UK, USA and AUS, power supply 110-240 VAC, 50/60 Hz, suitable for wipe disinfection, for use with 11301 DE/DF Battery Light Source LED

C-CAM® Camera Head, 8-pin, one-chip CMOS camera head, resolution 640 x 480, focal length f = 20 mm, for use with C-HUB® 20290101 and C-HUB® II 20290301 as well as C-MAC® Monitors 8402 ZX/8403 ZX

C-MAC® Monitor for CMOS Endoscopes, 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

C-HUB® II Camera Control Unit, for use with C-CAM® Camera Head 20290132, 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
Imaging and OR Integration

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

Storage and administration of image and video data
Flexible support for image sources
Centralized communication interface

SCENARA® .store
3D IMAGE HD 4K
SCENARA® .connect

KARL STORZ SE & Co. KG, Dr.-Karl-Storz-Straße 34, 78532 Tuttlingen/Germany
www.karlstorz.com
Further information and an overview of Anesthesiology and Emergency Medicine products from KARL STORZ can be viewed on www.karlstorz.com, in the Human Medicine section, Anesthesiology and Emergency Medicine.