



ENDOWORLD®



# Choice Changes Everything

The C-MAC® HD series

# The C-MAC® HD Series

We are excited to introduce the next-generation 8404 C-MAC® HD platform. This is the first TRUE HD video intubation system available in the marketplace! The C-MAC® HD Monitor and 8404 series HD video laryngoscopes are the newest additions to the most versatile video intubation platform available today. The new monitor is backward and forward compatible with all new and existing C-MAC® video laryngoscopes, flexible video endoscopes, and optical stylets.

Discover the benefits of having two endoscopes from the C-MAC® family connected at the same time, either in the Picture-in-Picture (PiP) or

Side-by-Side (SbS) mode. You can also save your images and videos in the selected mode.

The versatility of the C-MAC® platform, with both reusable and single-use products, allows KARL STORZ to be the true consultant to the customer today and as their needs change into the future.

The C-MAC® HD is the most comprehensive platform with the most comprehensive connectivity.



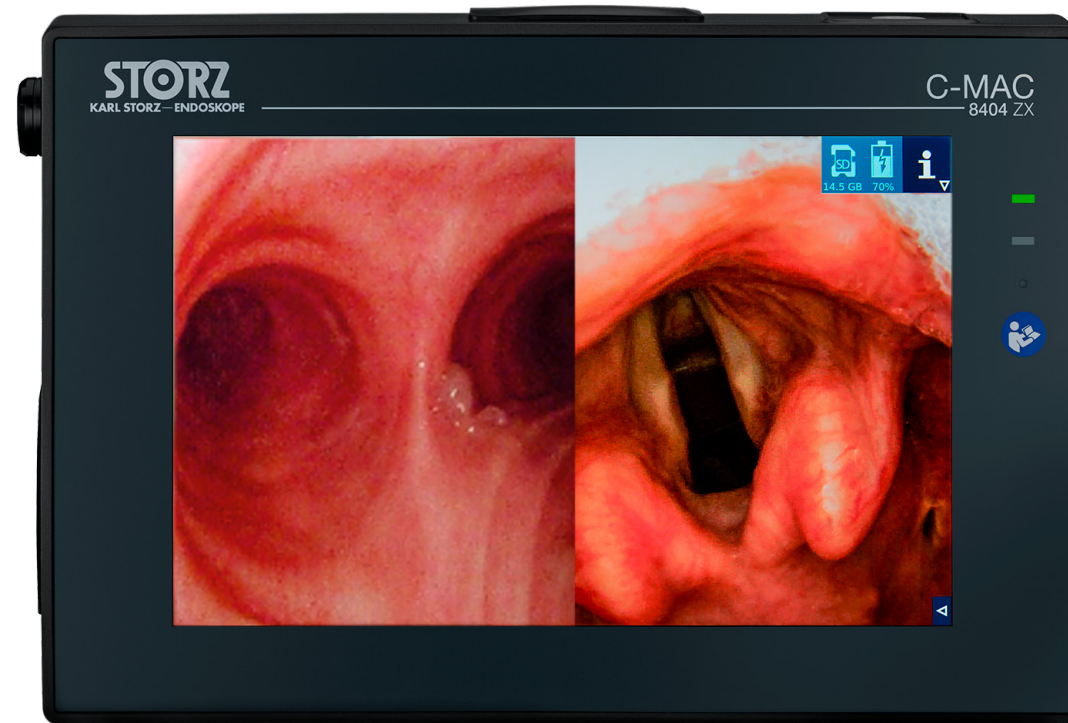
## The C-MAC® System – Simplicity with Connectivity Choice Changes Everything



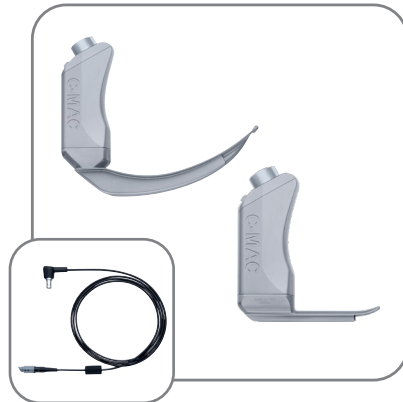
# The C-MAC® HD Monitor: The Heart of the C-MAC® System

- **CMACtouch** – Interactive FULL HD touch screen that can be used while wearing OR gloves
- **CMACdual** – Picture-in-Picture and Side-by-Side modes
- **CMACrec** – Choice between Click-to-Record, Auto-Record, or Time Machine mode\*
- **CMACmic** – Integrated microphone allows audio comments to be added to your videos
- **CMACsolution** – Increased diversity of visualization through maximum flexibility of single-use and reusable products
- **CMACtimer** – Timer for documenting intubation time for the purposes of training or study

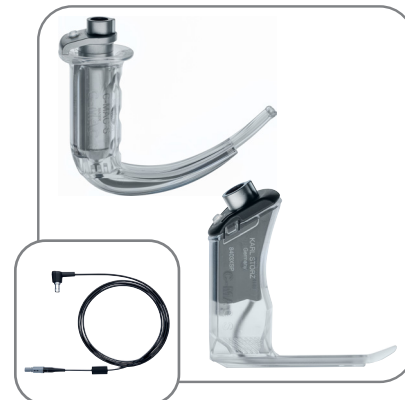
\* Thanks to the new C-MAC® HD monitor, when the Time Machine mode is activated and the recording button is pressed, 60 seconds of video is automatically saved before actuation.



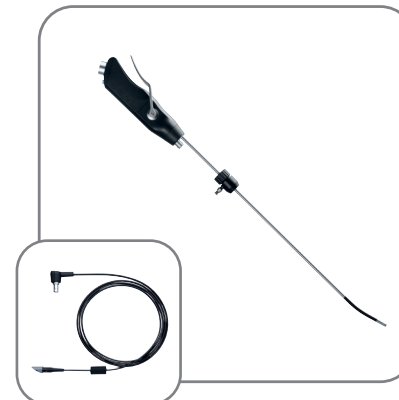
**C-MAC® HD  
Video Laryngoscopes**



**C-MAC® S Video  
Laryngoscopes**



**C-MAC® VS (Video Stylet)**



**FIVE S (Flexible Intubation  
Video Endoscopes –  
for single use)**



**FIVE (Flexible Intubation  
Video Endoscopes)**





# The C-MAC® POCKET MONITOR: The Emergency Tool for Time-Critical Situations

- 3.5" OTI® (Open To Intubate) display with wide viewing angle (160°)
- High-contrast image even in bright daylight
- Universal C-MAC® system interface, tailored to your airway management solutions from KARL STORZ
- Real-time documentation for quality assurance
- Exchangeable, rechargeable lithium-ion battery – operation time approx. 60 min with capacity indicator in the monitor, always ready for use
- Completely watertight (IPX8)
- Flexible positioning of the monitor for the intubation of difficult-to-access patients
- Additional standard: RTCA/DO-160G

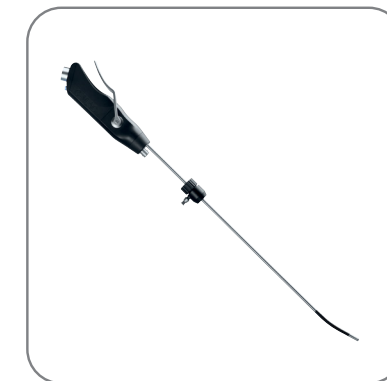
## C-MAC® HD Video Laryngoscopes

- Standard MACINTOSH and MILLER video laryngoscopes for safe intubation in both indirect and direct laryngoscopy
- D-BLADE and D-BLADE Ped. with strong curvature for the difficult airway



## C-MAC® S Video Laryngoscopes

- Single-use video laryngoscopes for minimizing the risk of cross-contamination



## C-MAC® VS (Video Stylet)

- Deflectable distal tip combines the advantages of both rigid and flexible intubation endoscopes



## C-MAC® PM Connecting Cable

- Enables flexible positioning of the monitor for difficult-to-access areas

# The C-MAC® HD Video Laryngoscopes

## Choose clearer visualization

- We raise your standards – visualization of intubation in HD (800p)\*
- Lighter, better impact-resistance, more robust – the new TITANIUM handle
- When seconds count – plug-and-play with C-MAC® HD
- BlueButton for real-time documentation in HD\*
- Added safety thanks to the improved telescope mount
- Can be combined with C-MAC® monitors of the 3rd and 4th generations
- Validated for all standard reprocessing methods up to 93°C
- Protect yourself and others – maintain your distance with C-MAC® HD video laryngoscopes

\*with Monitor 8404ZXK only

### C-MAC® MACINTOSH #4, #3, #2, #0



### C-MAC® MILLER #2, #1, #0



### C-MAC® D-BLADE and D-BLADE Ped.



# The C-MAC® S IMAGER

## A solution with single-use video laryngoscope blades

The single-use video laryngoscope blades work in perfect synergy with the reusable C-MAC® S IMAGER and are designed to reach the highest hygiene standards.

- Blade and handle form one continuous piece: Minimizes risk of cross-contamination
- Exchange of C-MAC® S video laryngoscopes within seconds
- BlueButton: Documentation via innovative multifunctional button and individual color coding
- Straightforward plug-and-play thanks to universal C-MAC® system interface

### C-MAC® S IMAGER



MACINTOSH #4



MACINTOSH #3



D-BLADE

### C-MAC® S Pediatric IMAGER



MILLER #1



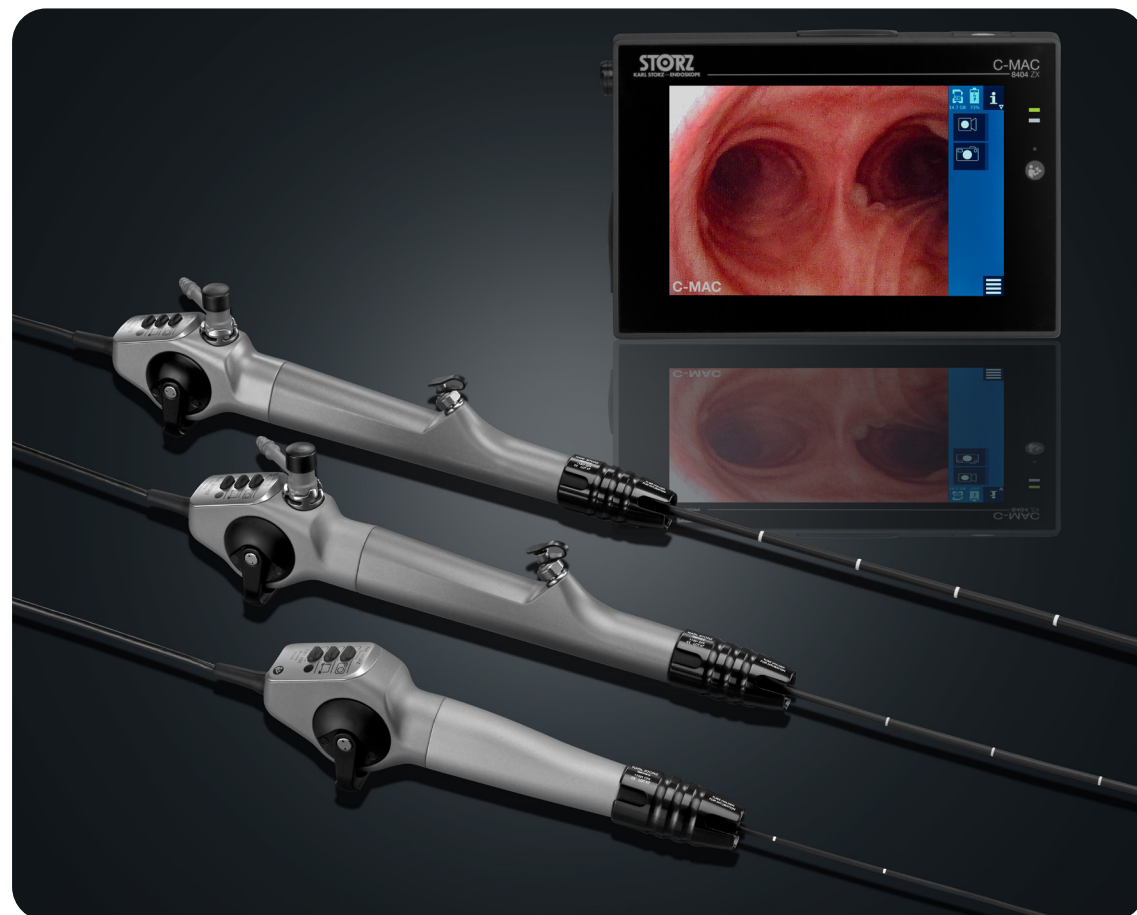
MILLER #0

## The Gold Standard: FIVE (Flexible Intubation Video Endoscope)

### Choice Changes Everything

With the Flexible Intubation Video Endoscopes (FIVE) 5.5 × 65, 4.0 × 65, and 3.0 × 51.5, KARL STORZ once again sets a new direction in airway management. Similar to the C-MAC® HD video laryngoscopes, the FIVE scopes deliver clear, pixel-free images without a Moiré effect. They connect directly to the C-MAC® HD monitor, allowing you to switch to the video laryngoscope very rapidly whenever necessary.

- Compatible with the C-MAC® HD monitor
- Compact design and ergonomic handle
- Checks positioning of double-lumen tubes (DLT)
- For inspection of the upper airways
- Practical tube fixation with special adaptor
- High image resolution and video imaging in 4:3 format
- Integrated LED light source

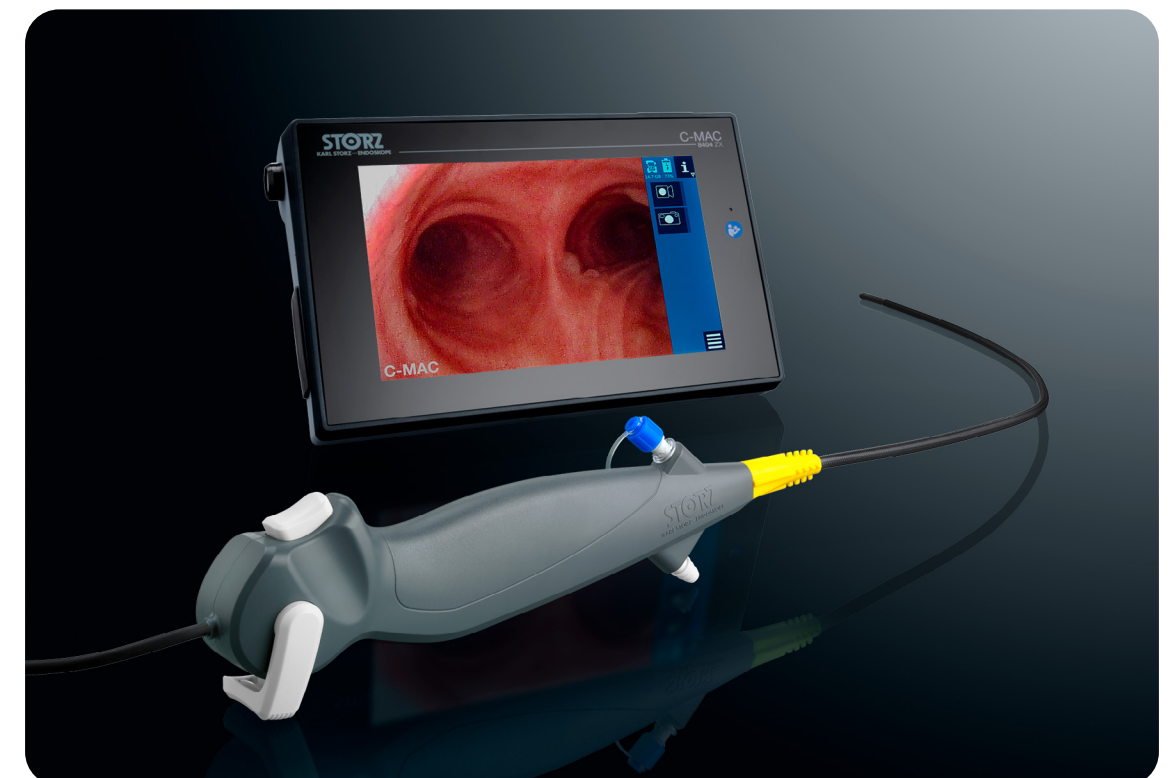


## The C-MAC® FIVE S

### Choice Changes Everything

At KARL STORZ, we have 75 years of endoscope experience. The result: our single-use C-MAC® FIVE S 5.3 with a level of quality and dependability that complements your reusable scopes. The C-MAC® is the most comprehensive platform with the most comprehensive connectivity. The FIVE S scopes take it even further. Imagine: All your patient needs covered under one versatile and hassle-free system.

- Be inspired by our image quality and complement our reusable FIVEs with our FIVE S single-use endoscopes
- Discover the new tactile feel of the FIVE S with our new handle design and color coding for size identification
- Very good maneuverability, thanks to the special sheath design with additional rigidity, tailored to your indications in airway management
- Perform at a new level – suction within seconds at the touch of a button with a working channel diameter of 2.2 mm
- Be impressed with the built-in ET tube holder and friction-free loading of the endotracheal tube
- Enhance your workflow flexibility and efficiency and benefit from reliable product availability without complex reprocessing cycles thanks to our protective sterile packaging with click protection





## The C-MAC® VS (Video Stylet)

Redefine your limits!

The C-MAC® VS can be considered a successor to the familiar retromolar intubation endoscope. Thanks to its sheath and deflectable tip, the C-MAC® VS combines the advantages of both rigid and flexible intubation endoscopes and is therefore of particular benefit in bariatric surgery or for patients with a restricted mouth opening or cervical spine problems. Thanks to its lever, the distal bend can easily be adapted to specific anatomic conditions. The high-resolution CMOS chip ensures clear, pixel-free images in a 4:3 format without a Moiré effect.

- Straightforward plug-and-play thanks to the universal C-MAC® system interface
- BlueButton: Documentation via innovative multifunctional button and individual color coding
- Reprocessing up to 65°C possible
- Completely watertight (IPX 8)
- Angulation up to 60° with attached endotracheal tube
- Continuous O<sub>2</sub> flow possible via tube adaptor between the tube and the instrument

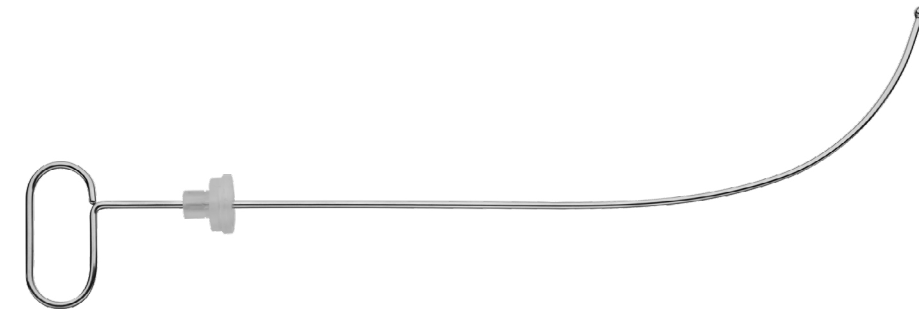


## Accessories: Little things that make work easier

We don't stop working when our products are complete – because we want to make life easier for you...

What facilitates the introduction of the endotracheal tube?

**The C-MAC® GUIDE**

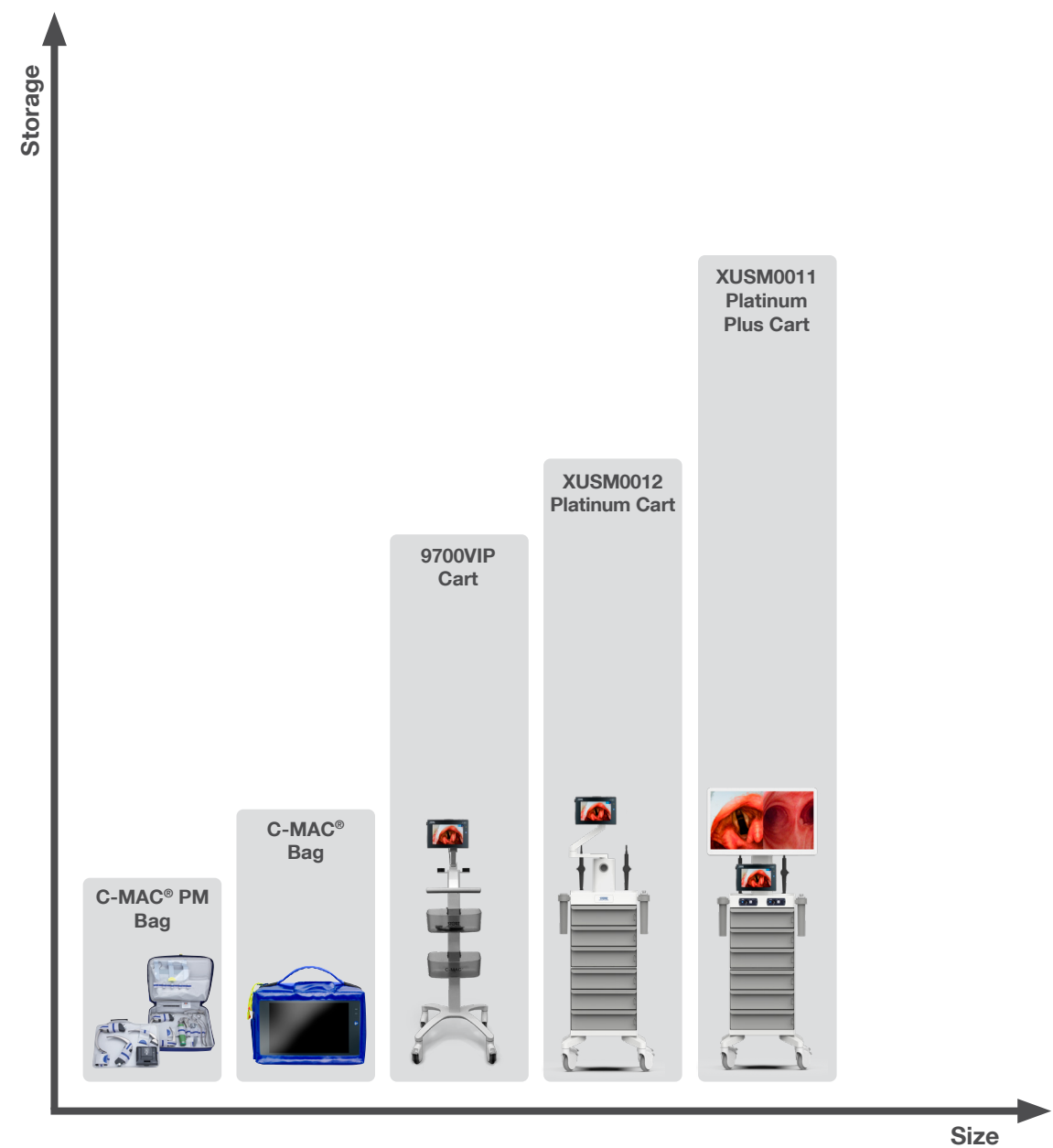


How can you remove foreign bodies from the oropharynx quickly and easily?









**With the modified MAGILL forceps**



In addition to the C-MAC® protective cover and the well-organized C-MAC® PM bag, we can also offer mobile airway management solutions.



What are the applications of the C-MAC® system?

	Bedside use		Emergency use	
	 General Anesthesia	 ICU	 Emergency room	 Prehospital
	✓	✓	✓	✓
	✓	✓	✓	✓
	✓	✓	✓	✗
	✓	✗	✓	✗



# The C-MAC® HD series

## Instrumentation

The most comprehensive platform with the most comprehensive connectivity



**8404ZXK** **C-MAC® HD Monitor for CMOS Endoscopes**, screen size 8 in. with 1920 × 1200 pixel resolution, two camera inputs, a USB and HDMI port, optimized user interface with touch screen, 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 supply 110–240 VAC, 50/60 Hz, for use with CMOS video endoscopes

including:  
**Protection Cap**  
**VESA 75 Quick Clip**  
**Power Supply Set**  
**SD Card Ultra, 16 GB**



**8403X** **C-MAC® Connecting Cable**, with C-MAC® system interface, for C-MAC® Monitors 8403ZXK, 8404ZXK, length 200 cm, for use with C-MAC® Video Laryngoscopes 8403/8404xxx



**8403XA** **C-MAC® Extension Cable**, for the transmission of analog and digital signals, dustproof according to IP50 standards (not waterproof), length 200 cm, for use with C-MAC® Monitor 8404ZX, in conjunction with all endoscopes of the KARL STORZ Office Line (8-pin instruments)



**8403XDK** **C-MAC® POCKET MONITOR Set**, unit with LCD monitor and power supply for all C-MAC® video laryngoscopes, with C-MAC® system interface, screen size 3.5 in. 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 8403/8404xxx

including:  
**Battery**, rechargeable  
**USB Data Cable**  
**Protection Cap**, for reprocessing



**8403XDP** **C-MAC® PM Connecting Cable**, for the transmission of digital signals from C-MAC® PM 8403XD to C-MAC® HD Video Laryngoscopes 8403/8404xxx (C-MAC® system interface), length 50 cm



**8403XDL** **Charging Unit**, for rechargeable Battery 8403XDA for C-MAC® PM 8403XD, 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 for C-MAC® PM



**8403XDA** **Battery**, rechargeable Li-ion battery for power supply of C-MAC® PM 8403XD, charging via Charging Unit 8403XDL, optimal operation time of 60 min, suitable for wipe disinfection



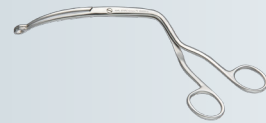
**8403XDD** **USB Data Cable**, USB 2.0 port, for data transfer from C-MAC® PM 8403XD to a computer, length 200 cm



**809120** **MAGILL Forceps**, for children, modified, length 20 cm, suitable for endoscopic foreign body removal, for use with video laryngoscopes sizes 1 and 2



**809125** **MAGILL Forceps**, modified, length 25 cm, suitable for endoscopic foreign body removal, for use with video laryngoscopes sizes 2–4



809120 MAGILL **Forceps**, for children, modified, length 20 cm, suitable for endoscopic foreign body removal, for use with video laryngoscopes sizes 1 and 2

809125 MAGILL **Forceps**, modified, length 25 cm, suitable for endoscopic foreign body removal, for use with video laryngoscopes sizes 2-4

8404BXC **C-MAC® HD Video Laryngoscope MAC #4**, CMOS technology, with MACINTOSH laryngoscope blade, size 4, with C-MAC® system interface, documentation of images and video sequences via BlueButton, for use with C-MAC® Connecting Cable 8403X for C-MAC® Monitor 8403ZXK, 8404ZXK and C-MAC® PM 8403XD

8404BX **Same**, with catheter introduction sizes 16-18 Fr.

8404AXC **C-MAC® HD Video Laryngoscope MAC #3**, CMOS technology, with MACINTOSH laryngoscope blade, size 3, with C-MAC® system interface, documentation of images and video sequences via BlueButton, for use with C-MAC® Connecting Cable 8403X for C-MAC® Monitor 8403ZXK, 8404ZXK and C-MAC® PM 8403XD

8404AX **Same**, with catheter introduction sizes 14-16 Fr.

8404KXC **C-MAC® HD Video Laryngoscope MAC #2**, CMOS technology, with MACINTOSH laryngoscope blade, size 2, with C-MAC® system interface, documentation of images and video sequences via BlueButton, for use with C-MAC® Connecting Cable 8403X for C-MAC® Monitor 8403ZXK, 8404ZXK and C-MAC® PM 8403XD



8404EXC **C-MAC® HD Video Laryngoscope MAC #0**, CMOS technology, with MACINTOSH laryngoscope blade, size 0, with C-MAC® system interface, documentation of images and video sequences via BlueButton, for use with C-MAC® Connecting Cable 8403X for C-MAC® Monitor 8403ZXK, 8404ZXK and C-MAC® PM 8403XD

8404MXC **C-MAC® HD Video Laryngoscope MILLER #2**, CMOS technology, with MILLER laryngoscope blade, size 2, with C-MAC® system interface, documentation of images and video sequences via BlueButton, for use with C-MAC® Connecting Cable 8403X for C-MAC® Monitor 8403ZXK, 8404ZXK and C-MAC PM 8403XD

8404GXC **C-MAC® HD Video Laryngoscope MIL #1**, CMOS technology, with MILLER laryngoscope blade, size 1, with C-MAC® system interface, documentation of images and video sequences via BlueButton, for use with C-MAC® Connecting Cable 8403X for 8403ZXK, 8404ZXK and C-MAC® PM 8403XD

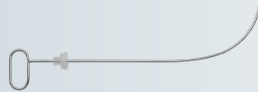
8404DXC **C-MAC® HD Video Laryngoscope MIL #0**, CMOS technology, with MILLER laryngoscope blade, size 0, with C-MAC® system interface, documentation of images and video sequences via BlueButton, for use with C-MAC® Connecting Cable 8403X for 8403ZXK, 8404ZXK and C-MAC® PM 8403XD

8404HX **HD Video Laryngoscope D-BLADE, for adults**, CMOS technology, for difficult intubation, with C-MAC® system interface, documentation of images and video sequences via BlueButton, with catheter introduction sizes 16-18 Fr. for use with C-MAC® Connecting Cable 8403X for C-MAC® Monitor 8403ZXK, 8404ZXK and C-MAC® PM 8403XD

8404HXP **C-MAC® HD Video Laryngoscope D-BLADE Ped., pediatric**, CMOS technology, for difficult intubation in children, with C-MAC® system interface, documentation of images and video sequences via BlueButton, for use with C-MAC® Connecting Cable 8403X for C-MAC® Monitor 8403ZXK, 8404ZXK and C-MAC® PM 8403XD



051116-10\* **C-MAC® S Video Laryngoscope D-BLADE**, laryngoscope blade for difficult intubation, for single use, package of 10, for use with C-MAC® S Imager 8402XS, 8403XS or 8403XSI



8401DS **C-MAC® Guide**, guide rod made of stainless steel with atraumatic tip, distal region is adapted to the blade shape of the C-MAC® video laryngoscope D-BLADE, fixation of endotracheal tube with the integrated tube holder possible, package of 10, for use with C-MAC® video laryngoscopes



8403XSPK **C-MAC® S Pediatric Imager**, Set, with C-MAC® system interface, for manual and machine disinfection up to 65°C and High-Level Disinfection (HLD) acc. to US standards, including Pressure Compensation Cap 11025E and Leakage Tester 13242XL, for use with C-MAC® Connecting Cable 8403X, C-MAC® Monitor 8403ZXK, 8404ZXK, C-MAC® PM 8403XD and single-use C-MAC® S Video Laryngoscopes 051110-10, 051111-10



8403XSI **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 8403X, C-MAC® Monitor 8403ZXK, 8404ZXK, C-MAC® PM 8403XD and single-use C-MAC® S Video Laryngoscopes 051113-10, 051114-10, 051116-10



051113-10\* **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 8402XS, 8403XS or 8403XSI



051114-10\* **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 8402XS, 8403XS or 8403XSI



051111-10\* **C-MAC® S Video Laryngoscope MIL #1**, for single use, package of 10, for use with C-MAC® S Pediatric Imager 8403XSP



051110-10\* **C-MAC® S Video Laryngoscope MIL #0**, for single use, package of 10, for use with C-MAC® S Pediatric Imager 8403XSP



10331BXK **C-MAC® VS**, rigid intubation video endoscope set, with deflectable tip, CMOS technology, for use with C-MAC® Connecting Cable 8403X for C-MAC® Monitor 8403ZXK, 8404ZXK and C-MAC® PM 8403XD

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



11303BNXK **Flexible Intubation Video Endoscope Set 5.5 x 65**, CMOS technology, with suction valve, for use with C-MAC® Monitors 8402X, 8403ZXK, 8404ZXK

Deflection up/down:	140°/140°
Direction of view:	0°
Angle of view:	100°
Working length:	65 cm
Total length:	94 cm
Working channel inner diameter:	2.1 mm
Distal tip outer diameter:	5.5 mm



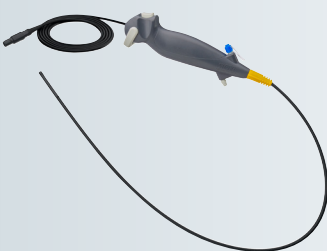
11302BDXK **Flexible Intubation Video Endoscope Set 4.0 x 65,**  
CMOS technology, with suction valve, for use with  
C-MAC® Monitor 8403ZXK, 8404ZXK

Deflection up/down:	140°/140°
Direction of view:	0°
Angle of view:	100°
Working length:	65 cm
Total length:	93 cm
Working channel inner diameter:	1.5 mm
Distal tip outer diameter:	4 mm



11301ABXK **Flexible Intubation Video Endoscope Set 3.0 x 51.5,**  
CMOS technology, for use with C-MAC® Monitor 8403ZXK,  
8404ZXK


Deflection up/down:	140°/140°
Direction of view:	0°
Angle of view:	100°
Working length:	51.5 cm
Total length:	72 cm
Distal tip outer diameter:	2.85 mm



0915612-06\* **Flexible Intubation Video Endoscope 5.3 x 65,** STERILE  
sterile, for single use, for use with C-MAC® Monitor  
8403ZXK (with E-Box TP012) and C-MAC® Monitor 8404ZXK

Deflection up/down:	180°/180°
Direction of view:	0°
Angle of view:	90°
Working length:	65 cm
Working channel diameter:	2.2 mm
Distal tip outer diameter:	5.3 mm



091361-06\* **Flexible Intubation Video Endoscope 3.5 x 65,** STERILE   
sterile, for single use, package of 6, for use with  
C-MAC® Monitor 8403ZXK (with E-Box TP012) and C-MAC®  
Monitor 8404ZXK

Deflection up/down:	180°/180°
Direction of view:	0°
Angle of view:	90°
Working length:	65 cm
Working channel diameter:	1.2 mm
Distal tip outer diameter:	3.5 mm



TP012 **E-Box**, for flexible videoendoscopes (8-pin)  
for single use, compatible with C-MAC® Monitor  
8403ZXK and C-HUB II



8404YD **Protective Bag**, blue, for the C-MAC® system, made of  
water-resistant and sturdy material, washable, bag contains  
separate compartments for the monitor and three C-MAC®  
video laryngoscopes, for use with C-MAC® Monitors 8401ZX,  
8402ZX, 8403ZX, Electronic Module 8402X, power supply,  
3x C-MAC® video laryngoscopes

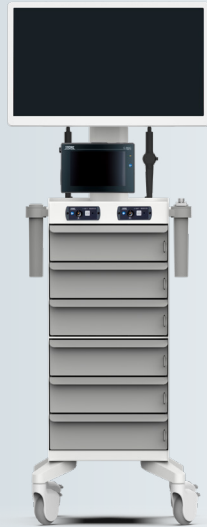


8403YE **Bag for Intubation Set -C22-**, ULM model, made of water-  
resistant and sturdy material, washable, bag contains two  
compartments with several holding possibilities for C-MAC®  
video laryngoscopes with C-MAC® PM and for conventional  
laryngoscopes, for use with C-MAC® PM 8401XDK, 8403XDK,  
C-MAC® Video Laryngoscopes 8401xxx/8403xxx/8404xxx and  
conventional laryngoscopes



8403YES **Bag for C-MAC® PM and IMAGER**, made of water-resistant  
and sturdy material, washable, for the transportation of  
C-MAC® PM and C-MAC® S Imager as well as the  
C-MAC® S Pediatric Imager, for use with C-MAC® PM  
8403XDK, C-MAC® S Imager 8403XSI and  
C-MAC® S Pediatric Imager 8403XSP





XUSM0011 **Platinum Plus Cart**, Lightweight design, easy to roll, Quick access to devices and supplies in drawers, Easy to clean with a damp cloth or a suitable disinfectant, Includes 2 side holders for S-Imager or Video Stylet, Removable front plate for C-HUB II mount option, Hospital-grade power cord, 15 ft

**Mount** Stationary VESA mount that supports up to 19.8 lbs and a VESA mount for the C-MAC® monitor.

**Casters** The precision bearing casters provide a smooth and quiet experience, with locking casters for stability when static.

**Holders** 2 side holders for the S-Imager or Video Stylet, which can be easily removed for cleaning.

**Drawers** 6 drawers are lined with the same Santoprene™ material, slide smoothly, and can be locked with red cable tie tags.

**Scope holder** Provides protection and storage for flexible intubation scopes. Includes a holster on the back to hold up to 2 boxes of the FIVE S Single-use scopes. The 9700TUBE/10 ProShield™ single-use sheaths must be ordered separately.

**Dimensions:** 18.9 in. (H) × 20.6 in. (W) × 59.9 in. (D)

**Weight:** 127 lbs.



XUSM0011 **Platinum Cart**, Lightweight design, easy to roll, Quick access to devices and supplies in drawers, Easy to clean with a damp cloth or a suitable disinfectant, Includes 2 side, holders for S-Imager or Video Stylet, Removable front plate for C-HUB II mount option, Hospital-grade power cord, 15 ft

**Mount**, The Platinum Cart has a VESA mounting plate for attaching the C-MAC® monitor.

**Casters** The precision bearing casters provide a smooth and quiet experience, with locking casters for stability when static.

**Holders** 2 side holders for the S-Imager or Video Stylet, which can be easily removed for cleaning.

**Drawers** 6 drawers are lined with the same Santoprene™ material, slide smoothly, and can be locked with red cable tie tags.

**Scope holder** Provides protection and storage for flexible intubation scopes. Includes a holster on the back to hold up to 2 boxes of the FIVE S Single-use scopes. The 9700TUBE/10 ProShield™ single-use sheaths must be ordered separately.

Articulating Arm allows the C-MAC® monitor to tilt up/down and pan left/right, for maximum adjustability for individual users.

**Dimensions:** 18.9 in. (H) × 20.6 in. (W) × 59.9 in. (D)

**Weight:** 105 lbs.



9700VIP Cart **Articulating Arm** extends forward and can tilt up or down, pan left and right, and rotate for customized positioning

**Two Scope Holders** help ensure secure storage and protection of flexible scopes

**Two Storage Bins** made of polycarbonate include cable management hooks on the back

**Curved Handle** is covered in a medical-grade Santoprene material, making it smooth to the touch for function and added comfort

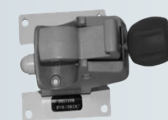
**Casters** have precision bearing assemblies for smooth, quiet transport

**C-MAC® Power Supply** is stored securely in a customized holder

**Dimensions:** Cart: 23 in. (L) × 19 in. (W) × 55 in. (H)

**Bins:** 12 in. × 6.5 in. (W) × 5 in. (H)

**Weight:** 24 lbs



9700-CLP **Clamp**

It is recommended to check the suitability of the product for the intended procedure prior to use.  
Please note that the described products in this medium may not be available yet in all countries due to different regulatory requirements.

## Notes

## Notes

# ENDOWORLD®



FOR U.S. USE ONLY

**STORZ**  
KARL STORZ—ENDOSKOPE

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