

Highlights 2018

Edition 1/2018



Anesthesiology and Emergency Medicine

STORZ
KARL STORZ – ENDOSKOPE



C-MAC® S for Pediatrics

The new MILLER single-use video laryngoscopes

The new pediatric single-use video laryngoscopes from KARL STORZ set new standards in airway management. The single-use MILLER 0 and 1 form a perfect symbiosis with the C-MAC® S Pediatric IMAGER and meet the highest hygiene standards.

- Blade and handle form one continuous piece: Risk of cross-contamination is drastically reduced
- 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
- Extremely safe and break-resistant C-MAC® S video laryngoscopes
- Ergonomic handle specially designed to meet requirements in pediatrics
- For direct and indirect laryngoscopy with MILLER blades

- 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:
- Protection Cap**
 - SD Card, 8 GB**
 - 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 20290301, length 200 cm, for use with C-MAC® Video Laryngoscopes 8403 xxx
- 8403 XSP **C-MAC® S Pediatric 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® POCKET MONITOR 8403 XD or C-HUB® II 20290301 and single-use C-MAC® S Video Laryngoscopes 051110-10, 051111-10
- 051110-10 **C-MAC® S Video Laryngoscope MILLER #0**, for single use, package of 10, for use with C-MAC® S Pediatric IMAGER 8403 XSP
- 051111-10 **C-MAC® S Video Laryngoscope MILLER #1**, for single use, package of 10, for use with C-MAC® S Pediatric IMAGER 8403 XSP



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

- 8403 XSI **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® POCKET MONITOR 8403 XD or C-HUB® II 20290301 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 KARL STORZ C-MAC® S IMAGER 8402 XS, 8403 XS or 8403 XSI
- 051114-10* **C-MAC® S Video Laryngoscope MAC #4**, with MACINTOSH laryngoscope blade, size 4, for single use, package of 10, for use with KARL STORZ C-MAC® S IMAGER 8402 XS, 8403 XS or 8403 XSI
- 051116-10* **C-MAC® S Video Laryngoscope D-BLADE**, with laryngoscope blade for difficult intubation, for single use, package of 10, for use with KARL STORZ C-MAC® S IMAGER 8402 XS, 8403 XS or 8403 XSI
- 8403 XDK **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", 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® POCKET MONITOR
Battery, rechargeable
USB Data Cable
- 8403 XDL **Charging Unit**, for one rechargeable battery for C-MAC® POCKET MONITOR, 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 8403 XDA and C-MAC® POCKET MONITOR 8403 XD
- 8403 XDA **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



LARYNGOBLOC for Pediatrics and Neonatology

For solutions that fit: The direct laryngoscope for single use

The LARYNGOBLOC is a cold light laryngoscope for single use. Thanks to its monoblock design, it features a high tensile strength. The entire laryngoscope can be discarded along with the handle. The battery insert provides extremely bright, white light that enables optimal illumination of the pediatric oral cavity during direct laryngoscopy.

- For direct laryngoscopy
- Blade and handle are made from one piece so that the LARYNGOBLOC is more robust than conventional laryngoscopes for single use
- Special design for pediatrics and neonatology: MACINTOSH 2, MILLER 0-1, OXFORD 0
- Available in five sizes and three laryngoscope shapes (MACINTOSH, MILLER, OXFORD) as well as three handle types (standard, slimline, short)

- 8530 DN MILLER **LARYNGOBLOC**, size 1, slender, for single use, clean packed, material: polypropylene, handle and blade in one piece, slender handle, package of 20, for use with LED Battery Insert 8547 HN
- 8530 EN MILLER **LARYNGOBLOC**, size 0, slender, for single use, clean packed, material: polypropylene, handle and blade in one piece, slender handle, package of 20, for use with LED Battery Insert 8547 HN
- 8512 C MACINTOSH **LARYNGOBLOC**, size 2, for single use, clean packed, material: polypropylene, handle and blade in one piece, long handle, package of 20, for use with LED Battery Insert 8547 HL
- 8512 CS **Same**, short handle, for use with LED Battery Insert 8547 HS
- 8533 F **LARYNGOBLOC**, OXFORD model, size 0, for single use, clean packed, material: polypropylene, handle and blade in one piece, long handle, package of 20, for use with LED Battery Insert 8547 HL
- 8533 FS **Same**, short handle, for use with LED Battery Insert 8547 HS
- 8547 HN **LED Battery Insert**, slimline, reusable, for LARYNGOBLOC with slender handle, with 2 batteries LR 06 – 1.5 V AA, for use with slender MILLER LARYNGOBLOC 8530 DN/EN and Battery 121306 KS
- 8547 HS **LED Battery Insert**, short, reusable, for LARYNGOBLOC with short handle, with 1 battery LR 06 – 1.5 V AA, for use with short MACINTOSH LARYNGOBLOC 8512 AS/BS/CS, short OXFORD LARYNGOBLOC 8533 FS, short MILLER LARYNGOBLOC 8530 DS/ES and Battery 121306 K
- 8547 HL **LED Battery Insert**, long, reusable, for LARYNGOBLOC with long handle, with 2 batteries LR 06 – 1.5 V AA, for use with MACINTOSH LARYNGOBLOC 8512 A/ B /C, LARYNGOBLOC OXFORD, size 0, 8533 F, MILLER LARYNGOBLOC 8530 D/E and Battery 121306 KS



The New Gold Standard: FIVE 3.0 for the Anticipated Difficult Airway

Fine, fast, focused – new visualization in flexible intubation

With the 3.0 x 51.5 and 4.0 x 65 Flexible Intubation Video Endoscopes (FIVE), KARL STORZ once again sets a new direction in airway management. Similar to the C-MAC® video laryngoscopes, the FIVEs deliver clear, pixel-free images without a Moiré effect. The new FIVE 3.0 impresses with a shortened working length, which was specially adapted to the anatomy of pediatric and neonatal patients, while the absence of a working channel makes instrument cleaning and disinfection extremely easy and fast.

Special Features:

- For the intubation of pediatric/neonatal patients
- For rapid inspection of the upper respiratory tract
- Compatible with the C-MAC® III monitor and the C-HUB® II camera control unit
- Compact design and ergonomic handle shape
- High image resolution in 4:3 format
- Integrated LED light source
- Greater sheath stiffness for controlled handling

11301 ABXK **Flexible Intubation Video Endoscope Set 3.0 x 51.5**, CMOS technology, 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, for use with **C-MAC® Monitor 8403 ZX** and **C-HUB® II 20290301**

including:

Flexible Intubation Video Endoscope 3.0 x 51.5

Leakage Tester

Tube Holder

Bronchoscope Insertion Tube, size 4, sterile

Bronchoscope Insertion Tube, size 2, sterile

Protection Cap

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



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 20290301 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:

Protection Cap

SD Card, 8 GB

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 20290301, length 200 cm, for use with C-MAC® Video Laryngoscopes 8403 xxx

8403 XDK **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", 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® POCKET MONITOR

Battery, rechargeable

USB Data Cable

8403 XDL **Charging Unit**, for one rechargeable battery for C-MAC® POCKET MONITOR, 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 8403 XDA and C-MAC® POCKET MONITOR 8403 XD



C-MAC® Video Laryngoscopes for Pediatrics and Neonatology

For solutions that fit: The new MACINTOSH 0

To meet requirements for pediatrics and neonatology, particularly when dealing with the difficult airway, the C-MAC® video laryngoscope portfolio has been expanded to include the MACINTOSH 0. Five different blades are available for video laryngoscopy in pediatrics and neonatology: MILLER 0 and 1, MACINTOSH 0 and 2 as well as D-BLADE Ped. Thanks to the extremely low blade profile and the optimal distance from the camera to the distal tip, the new MACINTOSH 0 and the enhanced MILLER 0 are particularly suitable for the intubation of premature babies.

- Particularly flat model, especially suited for neonatology
- For direct and indirect laryngoscopy
- For routine clinical use and training
- Specially shaped and shortened handle for pediatrics and neonatology
- The new C-MAC® PM connecting cable provides more room to maneuver

- 8403 GXC **C-MAC® Video Laryngoscope MIL #1**, CMOS technology, with MILLER laryngoscope blade, size 1, with C-MAC® system interface, documentation of images and video sequences via the BlueButton, for use with C-MAC® Connecting Cable 8403 X for C-MAC® Monitor 8403 ZXK or C-HUB® II 20290301 as well as C-MAC® PM 8403 XD
- 8403 DXC **Same**, size 0
- 8403 KXC **C-MAC® Video Laryngoscope MAC #2**, CMOS technology, with MACINTOSH laryngoscope blade, size 2, with C-MAC® system interface, documentation of images and video sequences via the BlueButton, for use with C-MAC® Connecting Cable 8403 X for C-MAC® Monitor 8403 ZXK or C-HUB® II 20290301 as well as C-MAC® PM 8403 XD
- 8403 EXC **C-MAC® Video Laryngoscope MAC #0**, CMOS technology, with MACINTOSH laryngoscope blade, size 0, with C-MAC® system interface, documentation of images and video sequences via the BlueButton, for use with C-MAC® Connecting Cable 8403 X for C-MAC® Monitor 8403 ZXK or C-HUB® II 20290301 as well as C-MAC® PM 8403 XD
- 8403 HXP **C-MAC® 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 the BlueButton, for use with C-MAC® Connecting Cable 8403 X for C-MAC® Monitor 8403 ZXK or C-HUB® II 20290301 as well as C-MAC® PM 8403 XD
- 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 capturing in real time on SD card
- 8403 X **C-MAC® Connecting Cable**, with C-MAC® system interface, for C-MAC® Monitor 8403 ZXK or C-HUB® II 20290301, length 200 cm, for use with C-MAC® video laryngoscopes 8403 xxx
- 8403 XDK **C-MAC® POCKET MONITOR Set**, unit with LCD monitor and power supply for all C-MAC® laryngoscopes, screen size 3.5", monitor movable via two rotation axes, rechargeable Li-ion batteries, 1 h operation time, 2 h charging time, power management with capacity indicator, protection class IPX8
- 8403 XDL **Charging Unit**, for one rechargeable battery 8403 XDA for C-MAC® POCKET MONITOR 8403 XD, with power supply and mains adaptor for EU, UK, USA and AUS, for use with battery for C-MAC® PM
- 8403 XDP **C-MAC® PM Connecting Cable**, for the transmission of digital signals from C-MAC® PM 8403 XD to C-MAC® video laryngoscopes 8403xxx (C-MAC® system interface), length 50 cm
- 8403 XDA **Battery for C-MAC® PM**, 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

- 11605 CK **Intubation Endoscope**, with eyepiece, outer diameter 2 mm, for ETT 2.5-3.5 mm, usable sheath 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
- 11301 D1 **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
- 11301 D3 **Same**, with coarse screw thread
- 121306 P **Photo Battery**, lithium, 3 V, CR 123 A
- 11301 DE **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
- 11301 DF **Same**, with fast screw thread
- 11301 DG **Charging Unit**, for two LED battery light sources, with fixed integrated power supply and adaptor for EU, UK, USA and Australia, power supply 110-240 VAC, 50/60 Hz, suitable for wipe disinfection, for use with 11301 DE/DF Battery Light Source LED
- 20290132 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
- 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
- 20290301 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

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



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THE DIAMOND STANDARD



KARL STORZ SE & Co. KG
Dr.-Karl-Storz-Straße 34, 78532 Tuttlingen/Germany
Postbox 230, 78503 Tuttlingen/Germany
Phone: +49 (0)7461 708-0
Fax: +49 (0)7461 708-105
E-Mail: info@karlstorz.com
www.karlstorz.com