

MDSC-8427

4K UHD surgical display



- Distinctive design, optimized for the operating room
- Flexible multi-modality imaging
- Fabulous 4K image quality
- BT.2020 compatible
- 12G-SDI and Quad-link 3G-SDI signals accepted

With Barco's MDSC-8427 surgical display, you'll experience the next level of surgical precision on one of the most versatile displays in the operating room. Featuring Barco's unequalled image quality, this 4K display has exceptional brightness and crisp contrast. It's how you'll see the most detailed picture on a 27" screen. And thanks to our smart image processing technology, specially designed for medical video, your surgical images will be razor-sharp.

True-to-life colors in the surgical suite

The MDSC-8427 has been designed for endoscopy imaging and the integrated operating room. The display has a wide color gamut and offers advanced color calibration algorithms. This results in the most accurate color reproduction, making it the preferred choice for real-time critical imaging.

User friendly

The dual user interface – there is one at the front as well as at the back – makes it easy to operate the display. The touch screen functions at the front can be programmed to meet the personal preferences of surgical staff. The intuitive user interface makes it easy to set up the screen or change the layout configurations of the display to fit the procedure. Four dedicated shortcut buttons enable fluent configuration of the display.

Distinctive design

The 27" screen delivers a stylish, sleek solution for 4K visualization in the operating room. Every detail has been carefully envisioned to assure a professional, purposeful, and elegant fit for the surgical suite. The 27" size offers a lightweight and attractive alternative to current 24" or 26" Full HD displays.

Perfectly safe

This 4K display features a unique, automated failover feature. A backup signal is guaranteed at all times – with no intervention – to ensure safe surgery. The display is easy to disinfect thanks to the smooth surface and splash-proof housing. The integrated cable cover combined with the rubber joystick ensure optimal hygiene. Needless to say, it has been approved for use near patients.

PRODUCT SPECIFICATIONS**MDSC-8427**

Screen technology	TFT AM LCD / IPS-PRO technology / LED backlight
Active screen size (diagonal)	27 inch (685 mm)
Active screen size (H x V)	597 x 336 mm
Aspect ratio (H:V)	16:9
Resolution	UHD (3840 x 2160)
Pixel pitch	0.155 mm
Color support	1 Billion (30 bit color depth)
Color gamut	Native = Wide color gamut (Adobe 92%) Calibrated color space: ITU-709, DCI-P3, BT.2020
Viewing angle (H, V)	178° Hor / 178° Ver
Luminance	Max: 750 cd/m² (typ.) @6500K : 550 cd/m² stabilized (typ.)
Contrast ratio	1400:1 (Typical)
Response time	Ton + Toff = 20 msec (typ.)
White point	Calibrated: 5600K, 6500K, 7600K, 9300K
Gamma curve	Native, 1.8, Video, 2.2, 2.4, DICOM
Front protection screen	2-side AR glass with anti-fingerprint
Keyboard	Front Keyboard : 5-key touch Capacitive (User programmable) Rear Keyboard : 5-key membrane (Menu navigation)
Video inputs	MDSC-8427 LED 4K-UHD input : 4K-UHD input selectable among: ■ 1x DP 1.1 up to 3840 x 2160 @30Hz ■ 2x DP 1.1 up to 1920 x 2160 @50Hz/60Hz ■ 1x DP 1.2 MST up to 3840 x 2160 @50Hz/60Hz ■ 2x HDMI 2.0 up to 3840 x 2160 @50Hz/60Hz FHD input (upscaled to UHD) ■ 1x DVI ■ 1x 3G-SDI;
Video inputs	MDSC-8427 12G 4K-UHD inputs: 4K-UHD input selectable among: ■ Quad-link 3G-SDI up to 4096 x 2160 @50Hz/60Hz ■ 12G-SDI up to 4096 x 2160 @50Hz/60Hz ■ 1x DP 1.1 up to 4096 x 2160 @25Hz/30Hz ■ 2x DP 1.1 up to 2048 x 2160 @50Hz/60Hz ■ 1x DP 1.2 MST up to 4096 x 2160 @50Hz/60Hz ■ 2x HDMI 2.0 up to 4096 x 2160 @50Hz/60Hz FHD input (upscaled to 4K) ■ 1x DVI-SL

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Video outputs	MDSC-8427 LED ■ 1x 3G-SDI (3G-SDI input loop-through) ■ 1x DVI (4K display screen clone - downscaled to FHD) MDSC-8427 12G ■ 2x 12G-SDI (input loop through) ■ 1x DVI (4K display screen clone - downscaled to FHD)
Features	Video processing optimized for low latency and noise reduction, Picture-in-Picture, Picture-by-Picture, Image Mirror and Rotation, Failover mode, Screen clone on DVI out, FHD input upscaled to UHD, Legacy signals accepted, Programmable functional keys, DC Power output, cable cover.
Remote control	Remote control of Monitor functions available on: ■ USB type B port for FW download and remote control ■ Remote control through DDC on DVI and DP
Power consumption	MDSC-8427 LED: Max 100W / 25V $\pm$ 10% MDSC-8427 12G: Max 120W / 25V $\pm$ 10% Low power mode: MDSC-8427 LED: 18W Typ MDSC-8427 12G: 33W Typ Power-off: ~ 1W
Power consumption	AC input: 100 – 240 VAC / 47-63 Hz auto-switch DC output: +25V / 8A
DC power output	(Power-to-dongle) DC connector: +5V / 2A Available also on DVI, DP and USB ports
Dimensions (W x H x D)	657 x 418 x 75 mm (25.9 x 16.5 x 3.0 in)
Dimensions (packaged)	860 x 560 x 180 mm (33.9 x 22.0 x 7.1")
Net weight display	9.1 Kg / 20.7 lbs
Net weight packaged	13.2 kg / 29.1 lbs
Mounting standard	100x100 mm VESA
Operating temperature	0° -40° for safety/ 5° -35° recommended
Storage temperature	-20° -60°C
Operating humidity	20% – 85% R.H.
Storage humidity	10% – 85% R.H.
Compliance	■ ANSI/AAMI ES60601-1 (2005 + C1:09 + A2:10 + A1:2014) ■ CAN/CSA-C22.2 No. 60601-1 (2014) ■ IEC 60601-1:2005 (Third Edition) + CORR. 1:2006 + CORR. 2:2007 + A1:2012 ■ EN 60601-1: 2006 + CORR:2010 + A1:2013 + A12:2014 ■ Electromagnetic Compatibility: EMC Medical EMC Standards: IEC 60601-1-2 (2014), EN 60601-1-2 (2015) EN55011 /CISPR 11, FCC CFR47 Part 15 Subpart B (Class B) ■ GB17625.1-2012; GB4943.1-2011; GB/T9254-2008 ■ Approvals/Marking: CE, c-UL-us, DEMKO, CCC, INMETRO, BIS
Protection rating	IP21 (IP45 front side)
Warranty	3 years
Green compliance	ROHS-3, REACH, WEEE

Last updated: 13 Jul 2020

Technical specifications are subject to change without prior notice. Please check www.barco.com for the latest information.