# **MDSC-8427**

## 4K UHD surgical display



- Distinctive design, optimized for the operating room
- Flexible multi-modality imaging
- Fabulous 4K image quality

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.)<br>@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 :   |
|                               | <ul> <li>1x DP 1.1 up to 3840 x 2160 @30Hz</li> <li>2x DP 1.1 up to 1920 x 2160 @50Hz/60Hz</li> <li>1x DP 1.2 MST up to 3840 x 2160 @50Hz/60Hz</li> <li>2x HDMI 2.0 up to 3840 x 2160 @50Hz/60Hz</li> </ul>  |
|                               | FHD input (upscaled to UHD)  |
|                               | <ul><li>1x DVI</li><li>1x 3G-SDI</li></ul>   |
| Video inputs                  | MDSC-8427 12G  |
|                               | 4K-UHD inputs:   |
|                               | <ul> <li>1x DP 1.1 up to 3840 x 2160 @30Hz</li> <li>2x DP 1.1 up to 1920x2160 @50Hz/60Hz</li> <li>1x DP 1.2 MST up to 3840 x 2160 @50Hz/60Hz</li> <li>2x HDMI 2.0 up to 3840 x2160 @50Hz/60Hz</li> <li>4K SDI:</li> <li>4x 3G-SDI up to 1920x1080 @50Hz/60Hz (Quad link) or, alternatively</li> <li>2x 12G-SDI up to 3840 x 2160 @50Hz/60Hz</li> </ul> |
|                               | FHD input (upscaled to 4K)   |
|                               | ■ 1x DVI-SL<br>■ 1x 3G-SDI   |
|                               |  |

| PRODUCT SPECIFICATIONS | MDSC-8427  |
|------------------------|--|
| Video outputs          | MDSC-8427 LED  |
|                        | <ul> <li>1x 3G-SDI (3G-SDI input loop-through)</li> <li>1x DVI (4K display screen clone - downscaled to FHD)</li> </ul>  |
|                        | MDSC-8427 12G  |
|                        | <ul> <li>2x 12G-SDI (input loop through)</li> <li>1x DVI (4K display screen clone - downscaled to FHD)</li> </ul>  |
| Features               | Video processing optimized for low latency and noise reduction, Picture-in-Picture, Picture-by-Pictur 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 2.0 type B port through DDC protocol on DVI and DP  |
| Power consumption      | MDSC-8427 LED:Max 100W / 25V <u>+</u> 10%  |
|                        | MDSC-8427 12G: Max 120W / 25V ± 10%  |
|                        | Low power mode:  |
|                        | MDSC-8427 LED: 20W Typ   |
|                        | MDSC-8427 12G: 24W Typ   |
|                        | Power-off: ~ 1W  |
| Power consumption      | AC input: 100 – 240 VAC / 47-63 Hz auto-switch<br>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)  |
| 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             | <ul> <li>ANSI/AAMI ES 60601-1:2005/(R)2012 and A1:2012, C1:2009/(R)2012 and A2:2010/(R)2012 - Med. El. Equip., Part 1: general req. for basic safety and essential performance.</li> <li>CAN/CSA-C22.2 No. 60601-1: 14 Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance (Harmonized with Ed. 3.1)</li> <li>IEC 60601-1: 2012 Edition 3.1 (Medical electrical equipment - Part 1: General requirements for basic safety and essential performance)</li> <li>EN 60601-1: 2006 + A1:2013 (Medical electrical equipment - Part 1: General requirements for safety)</li> <li>Electromagnetic Compatibility: EMC Medical EMC Standards: IEC60601-1-2, EN55011 /CISPR 11, FCC CFR47 part 15 &amp; 18/Class B</li> <li>Approvals/Marking: CE, c-UL-us, DEMKO.</li> </ul> |
| Protection rating      | IP21 (IP45 front side)   |
| Warranty               | 3 years  |
| Green compliance       | ROHS-3, REACH, WEEE  |

#### Last updated: 10 May 2019

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

