

# MDSC-8255

4K UHD large-screen surgical display



- 55-inch wide-screen color LCD with Quad Full HD resolution
- Wide viewing angle
- Advanced image processing algorithms
- BT.2020 compatible
- 12G-SDI and Quad-link 3G-SDI signals accepted

Barco's MDSC-8255 is a 55-inch surgical display purpose-built for ultra-high resolution, multi-image viewing in the digital operating room. Thanks to its high quality video performance and lightweight housing with shallow depth and thin bezel, it's the ideal complement of any advanced video distribution system in the OR.

### Large-screen 4K UHD resolution display for referral imaging

A future-proof choice for referral imaging in the OR, the MDSC-8255 can present information previously shown on four 27" monitors on one large screen, with all four images in full HD. Thanks to the integrated 4K decoder (optional) it offers seamless integration with Barco's Nexxis video-over-IP solution.

### Wall-mount flexibility

With its protective front glass, shallow depth, thin bezel and light weight the MDSC-8255 is perfect for wall mounting.

### Delivering image quality on large screens

Color-calibrated, artifact free images in 4K resolution: the MDSC-8255 presents surgeons with accurate, realistic images and excellent depth perception. Advanced video processing features and noise reduction algorithms, and a full 10-bit image processing chain make this display ideal for consultation of any kind of medical referral images inside the OR.

**PRODUCT SPECIFICATIONS****MDSC-8255**

|                               |  |
|-------------------------------|--|
| Display technology            | TFT AM LCD / IPS technology / LED backlight  |
| Active screen size (diagonal) | 54,6" / 1388 mm  |
| Active screen size (H x V)    | 1210 x 640 mm  |
| Aspect ratio                  | 16:9   |
| Resolution                    | 3840 x 2160  |
| Pixel pitch                   | 0.315 mm   |
| Color support                 | 1073 million (10-bit)  |
| Color calibration             | ITU-709, DCI-P3, BT.2020   |
| Viewing angle                 | 178° Hor / 178° Ver  |
| Brightness                    | Max: 500 cd/m <sup>2</sup> (typ.)<br>@6500K : 300 cd/m <sup>2</sup> stabilized (typ.)  |
| Contrast ratio                | 1100:1 (max.)  |
| Response time                 | Gray-to-Gray = 8 msec (typ.)   |
| White point                   | Calibrated: 5600K, 6500K, 7600K, 9300K   |
| Gamma curve                   | Native, 1.8, Video, 2.2, 2.4, DICOM  |
| Front protection screen       | Scratch-resistant 2-side AR glass  |
| Keyboard                      | Membrane keyboard on side  |
| Video inputs                  | <p>MDSC-8255 LED</p> <p>4K-UHD input selectable among:</p> <ul style="list-style-type: none"><li>1x DP 1.1 up to 3840 x 2160 @25Hz/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> <p>FHD input (upscaled to UHD):</p> <ul style="list-style-type: none"><li>1x DVI</li><li>1x 3G-SDI</li></ul> <p>MDSC-8255 12G</p> <p>4K-UHD input selectable among:</p> <ul style="list-style-type: none"><li>• Quad-link 3G-SDI up to 3840 x 2160 @50Hz/60Hz</li><li>• 12G-SDI up to 3840 x 2160 @50Hz/60Hz</li><li>• 1x DP 1.1 up to 3840 x 2160 @25Hz/30Hz</li><li>• 2x DP 1.1 up to 2048 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> <p>FHD input (upscaled to UHD):</p> <ul style="list-style-type: none"><li>• 1x DVI</li></ul> <p>MDSC-8255 MNA</p> <p>4K-UHD input selectable among:</p> <ul style="list-style-type: none"><li>• 1x DP 1.1 up to 3840 x 2160 @25Hz/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 FO SFP+ module for 4K-UHD Nexxis link</li></ul> <p>FHD input (upscaled to UHD):</p> <ul style="list-style-type: none"><li>• 1x DVI</li><li>• 1x 3G-SDI</li></ul> |
| Video outputs                 | <p>MDSC-8255 LED &amp; MNA</p> <ul style="list-style-type: none"><li>1x 3G-SDI (input loop through)</li><li>1x DVI (screen clone downscaled to FHD)</li></ul> <p>MDSC-8255 12G</p> <ul style="list-style-type: none"><li>2x 12G-SDI (input loop through)</li><li>1x DVI (screen clone downscaled to FHD)</li></ul>   |

**PRODUCT SPECIFICATIONS****MDSC-8255**

|                              |   |
|------------------------------|---|
| <b>Features</b>              | 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, DC Power output  |
| <b>Remote control</b>        | MDSC-8255 LED & 12G<br>micro-USB port for FW download & control protocol<br><br>MDSC-8255 MNA<br>FW download through network connection   |
| <b>Power consumption</b>     | MDSC-8255 LED: 144W (max)/ 90 ÷ 264 Vac 50Hz/60Hz<br>MDSC-8255 12G: 162W (max)/ 90 ÷ 264 Vac 50Hz/60Hz<br>MDSC-8255 MNA: 170W (max) / 90 ÷ 264 Vac 50Hz/60Hz Low power mode   |
| <b>Dimensions</b>            | 1259 x 733 x 87 mm (49.5 x 28.8 x 3.4 in)   |
| <b>Net weight display</b>    | MDSC-8255 LED: 33.2 kg (73.1 lbs)<br>MDSC-8255 MNA: 34.2 kg (75.3 lbs)<br>MDSC-8255 12G: 33.5 kg (73.8 lbs)   |
| <b>Net weight packaged</b>   | MDSC-8255 LED: 39.7 kg (87.5 lbs)<br>MDSC-8255 MNA: 41.2 kg (90.8 lbs)<br>MDSC-8255 12G: 40.6 kg (89.5 lbs)   |
| <b>Mounting standard</b>     | VESA 200x200 & 600x200 mm   |
| <b>Temperature</b>           | Operating: 0° ÷ 35°<br>Storage: -20° ÷ 60°  |
| <b>Humidity</b>              | Operating: 10% ÷ 90% R.H.<br>Storage: 5% ÷ 90% R.H.   |
| <b>Regulation Compliance</b> | <ul style="list-style-type: none"><li>• ANSI/AAMI ES60601-1 (2005 + C1:09 + A2:10 + A1:2014</li><li>• CAN/CSA-C22.2 No. 60601-1 (2014)</li><li>• IEC 60601-1:2005 (Third Edition) + CORR. 1:2006 + CORR. 2:2007 + A1:2012</li><li>• EN 60601-1: 2006 + CORR:2010 + A1:2013 + A12:2014</li><li>• 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)</li><li>• GB17625.1-2012; GB4943.1-2011; GB/T9254-2008</li><li>• Approvals/Marking: CE, c-UL-us, DEMKO, CCC, INMETRO, EAC</li><li>• The products comply with the Safety and performance requirements of Regulation (EU) 2017/745 (MDR)</li></ul> |
| <b>Protection rating</b>     | IP20 (IP45 front side)  |
| <b>Warranty</b>              | 3 years   |
| <b>Green compliance</b>      | ROHS-3, REACH, WEEE   |

Last updated: 29 Nov 2021

Technical specifications are subject to change without prior notice. Please check [www.barco.com](http://www.barco.com) for the latest information.