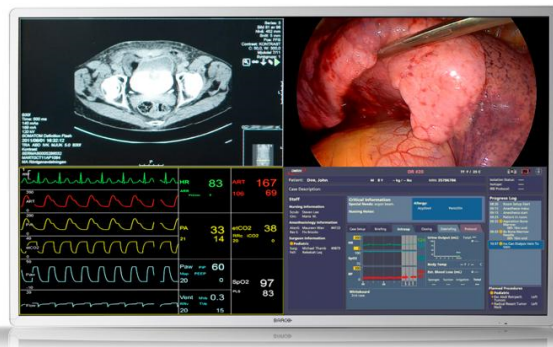


# MDSC-8255

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

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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, DC Power output                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Remote control        | MDSC-8255 LED & 12G<br>micro-USB port for FW download & control protocol<br><br>MDSC-8255 MNA<br>FW download through network connection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Power consumption     | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Dimensions            | 1259 x 733 x 87 mm (49.5 x 28.8 x 3.4 in)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Net weight display    | 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Net weight packaged   | 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Mounting standard     | VESA 200x200 & 600x200 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Temperature           | Operating: 0° ÷ 35°<br>Storage: -20° ÷ 60°                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Humidity              | Operating: 10% ÷ 90% R.H.<br>Storage: 5% ÷ 90% R.H.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Regulation Compliance | <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> |
| Protection rating     | IP20 (IP45 front side)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Warranty              | 3 years                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Green compliance      | 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.