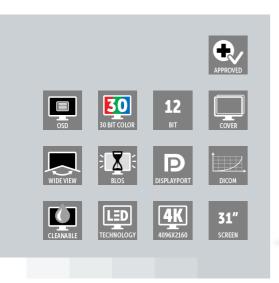
# **MDSC-8232**

# 31-inch 4K UHD surgical display





- Perfect match for 4K endoscopy cameras
- Shows images with astonishing detail
- Medical-grade and smart design
- Works with Nexxis for video-over-IP integration

Barco's MDSC-8232 is a 31-inch near-patient surgical display purpose-built for 4K imaging in the digital operating room and interventional radiology control room. It offers an easy-clean design, smart mechanics and the most life-like images today.

### Ease of mind

Flawless 4K imaging

The perfect match for 4K endoscopy camera systems, the MDSC-8232 presents endoscopic images with a resolution four times that of HD. This provides surgeons with more detail-rich, color-correct images for real-life presentation of the patient anatomy and excellent depth perception.

Images are presented with unrivaled color accuracy (thanks to advanced color calibration according to broadcast standards), without artifacts, and with near-zero latency for optimal hand-eye coordination.

The 31-inch display size makes the MDSC-8232 also ideally suited for use in the interventional radiology control room.

#### Multi-source, multi-display imaging

With its broad input connectivity, the MDSC-8232 offers flexible multi-modality imaging (PiP & PaP) in new integrated operating rooms. The 31-inch display also offers integrated functionality (optional) for use with Barco's Nexxis solution for video-over-IP integration.

#### Safety, stability and redundancy

Thanks to its high-bright LED backlight with light output stabilization, the display ensures a long lifetime and image consistency across displays. It also offers a unique, automated failover feature so a backup signal is always available to



MDSC-8232 Barco

ensure safe surgery.

# **Ease of installation**

The MDSC-8232 comes with a smart cable management system that hides the cables for a clutter-free set-up. Its lightweight design allows easy mounting on surgical booms and spring arms.

# Ease of use

Barco's MDSC-8232 allows for easy cleaning and disinfection thanks to its smooth surface, splash-proof housing (front protection level IPX5). It comes with a highly durable, scratch-resistant front glass featuring excellent optical performance.

PRODUCT SPECIFICATIONS	MDSC-8232
Screen technology	TFT AM LCD / IPS-PRO technology / LED backlight
Active screen size (diagonal)	789 mm (31.1°)
Active screen size (H x V)	698 x 368 mm
Aspect ratio	17:9
Resolution	4K-2K (4096 x 2160)
Pixel pitch	0.1704 mm
Color support	1073 million (10-bit)
Color gamut	Native: 96% DCI-P3
Viewing angle	178° Hor / 178° Ver
Maximum luminance	Max 550 cd/m² (typ.)
	@ITU709: 500 cd/m2 stabilized (typ.)
Contrast ratio	1400:1 (typ.)
Response time	T on + T off (=rise + fall): 20 ms (typ.)
White point	Calibrated: 5600K, 6500K, 7600K, 9300K
Gamma curve	Native, 1.8, 2.0, 2.2, 2.4, DICOM
Front protection screen	Anti-reflective Glass, 2mm
Keyboard	Capacitive 7-key touch keyboard
Video inputs	MDSC-8232 LED  4K-UHD input selectable among: 1x DP 1.1 up to 4096 x 2160 @30Hz 2x DP 1.1 up to 1920x2160 @50Hz/60Hz genlocked 1x DP 1.2 MST up to 4096 x 2160 @50Hz/60Hz  FHD input (upscaled to 4K): 1x DVI 1x 3G-SDI  MDSC-8232 MNA  4K-UHD input selectable among: 1x DP 1.1 up to 4096 x 2160 @30Hz 2x DP 1.1 up to 4096 x 2160 @30Hz 2x DP 1.1 up to 1920x2160 @50Hz/60Hz genlocked 1x DP 1.2 MST up to 4096 x 2160 @50Hz/60Hz 2x FO SFP+ for 4K-UHD Nexxis link  FHD input (upscaled to 4K) 1x DVI 1x 3G-SDI
Video outputs	1x 3GSDI (3GSDI input loop through) 1x DVI (DP 4K input downscaled to DVI FHD output)
Video formats	-Display Port 1.2 MST (10 bit) up to 4096x2160 @60Hz (displayed at native resolution)
	-Dual stream DP 1.1 (10-bit) up to 1920x2160 x2 @60Hz synchronized (displayed at native resolution)
	-3G-SDI (10-bit), in compliance with: SMPTE 425M (Level A), SMPTE 424M, SMPTE 292M, SMPTE 259M, SMPTE 296M, ITU-R BT.656, ITU-R BT.601
	-DVI (8bit) up to 1920x1080 @60Hz
Multi-image support	Picture-in-Picture (Main = DP, PiP = DVI or SDI)

PRODUCT SPECIFICATIONS	MDSC-8232
Failover mode	Supported with Main input = DP1.1 or DP1.2 or Nexxis & Backup input = DVI or SDI
Remote control	microUSB port for FW download & control protocol
Power consumption (nominal)	MDSC-8232 LED: 110W / 24V ± 10% MDSC-8832 MNA: 150W / 24V ± 10% Stand-by: 20W / Power off: 1W
External power supply	AC input: 100 – 250 VAC / 47-63 Hz auto-switch DC output: +24 VDC / 10 A
Dimensions w/o stand (W x H x D)	777 x 472 x 117 mm / 30.6 x 18.6 x 4.6 in
Net weight w/o stand	15.0 Kg / 33.1 lbs (MDSC-8232 LED)
	15.5 Kg / 34.2 lbs (MDSC-8232 MNA)
Mounting standard	100x100 & 200x100 mm VESA
Temperature	Operating: 0° -35° C Storage: -20° -50° C
Humidity	Operating: 10% – 85% R.H. Storage: 5% – 85% R.H.
Regulation 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, KCC, (CCC in progress). Note: PSE available on power supply unit.</li> </ul>
Certifications	IP20 (IP45 front side only)
Warranty	3 years
Green compliance	ROHS-2, REACH, WEEE

## Last updated: 14 Jan 2021

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

