MDSC-8232 M3D

Surgical 2D and 3D display with Nexxis 3D HD/4K integration

OPTICAL GLASS	4K ENHANCED	BRIGHT
LED BACKLIGHT	WIDE ANGLE	WIDE GAMUT	COVER
CLEARED	30 BIT	BLOS	DISPLAYPORT
DICOM	CLEANABLE	31" SCREEN	3D GLASSES-BASED

- **Perfect match for HD/4K 3D endoscopy cameras**

- **Fully compatible with 2D and 3D modes, FHD and 4K/UHD resolution**

- **BT.2020 & BT.709 compatible**

- **3D ergonomic eye-shield included**

- **Medical-grade, easy to clean design**

The MDSC-8232 M3D is a 31-inch 2D and 3D surgical monitor that is compatible with Barco's Nexxis video-over-IP solution.

100% compatibility with existing Nexxis installations

The display has a built-in MNA decoder, which means that it can be seamlessly integrated into an existing Nexxis architecture, just like any other Nexxis source. In a Nexxis configuration, the monitor is compatible with the most common 3D and 2D video formats typical of modern microscopes and laparoscopic camera systems. 3D sources become part of the full integration, including support for inter-OR sharing, remote management, streaming and recording.

3D technology as part of your digital OR

The display is based on a circular polarization technology for 3D visualization with passive glasses. Thanks to the Nexxis integration, it automatically switches between 2D and 3D modes to show the video source in its best suitable format.

Visual comfort in a wide viewing area

In 3D mode, multiple users at the same time will be able to see the image with excellent depth perception and no visual discomfort in a large viewing area. The display also provides HD and 4K image quality with high color accuracy, detailed images and no artifacts. Near-zero latency enables optimal hand-eye coordination.

The full-glass front surface is durable and scratch-resistant make the display easy to clean. The designed in standard VESA-100 mounting plate allows easy mounting on surgical booms and spring arms.

BARCO

Product specifications	MDSC-8232 M3D
General specifications	
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 / 16:9
Resolution	4K / 2K (4096 x 2160) / UHD (3840 x 2160)
Pixel pitch	0.1704 mm
Color support	1073 million (10-bit)
Color gamut	Native: 92% DCI-P3 / 105% Adobe
Color calibration	ITU-709, DCI-P3, BT.2020
Viewing angle	178° Hor. / 178° Vert.
Luminance	Max: 450 cd/m² (typ.) @6500K: 360 cd/m2 calibrated
Contrast ratio	1300:1 (typ.)
White point	Native: 7200K Calibrated: 5600K, 6500K, 9300K
Gamma curve	1.8, Video, 2.2, 2.4, DICOM
Response time	T on + T off (i.e. rise + fall): 20 ms (typ.)
3D viewing distance	Optimal: >1500 mm; Minimum: 700 mm
Vert. viewing angle	@ Optimal viewing distance: 15.0° Up/Down (crosstalk < 7%)
Lens type	Circular polarization: Left eye on top
Keyboard	Capacitive 7-key touch keyboard
Video inputs	2D Input signals: 4K-UHD resolution 1x DP 1.1 up to 4096 x 2160 @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 f.o. SFP + for Nexxis link FHD resolution (upscaled to 4K) 1x DVI 1x 3G-SDI 3D Input signals: 4K-UHD resolution 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 f.o. SFP + for Nexxis link FHD input 1x DVI 1x 3G-SDI
Video outputs	2D Mode: 1x 3G-SDI (input loop through) 1x DVI (4K display screen clone –downscaled to 1080i/1080p) 3D Mode: 1x DVI (selectable Left or Right view –downscaled to 1080i/1080p)
Remote control	USB Type B port for FW download & control protocol
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, Hor & Ver parallax adjustment, 3D color matching for viewing images with glasses, DC Power output, cable cover.

Product specifications	MDSC-8232 M3D
Power consumption	190W (Max) / 24V ± 10% Low power mode: 52W Power-off: ~ 1W
External power supply	AC input: 100 – 240 VAC / 47-63 Hz auto-switch DC output: +24 VDC / 10 A
DC power output	DC connector: +5V / 2A Available also on DVI, DP and USB ports
Dimensions (W x H x D)	777 x 472 x 117 mm (30.6 x 18.6 x 4.6 in)
Dimensions packaged (W x H x D)	980 x 630 x 200 mm (35.4 x 24.8 x 7.9 in)
Net weight	15.3 kg (33.7 lbs)
Net weight packaged	21 kg (45.8 lbs)
Mounting standard	100x100 & 200x100 mm VESA
Temperature	Operating: 0° ÷ 30° C Storage: -20° ÷ 60° C
Humidity	Operating: 10% ÷ 90% R.H. (non-condensing) Storage: 5% ÷ 90% R.H. (non-condensing)
Regulation Compliance	• ANSI/AAMI ES60601-1 (2005 + C1:09 + A2:10 + A1:2014) • CSA CAN/CSA-C22.2 NO. 60601-1:14 • IEC 60601-1 Edition 3.1 (2012) • EN 60601-1: 2006 + CORR:2010 + A1:2013 + A12:2014 • IEC 60601-1-2 (2014) • EN 60601-1-2 (2015) • FCC CFR 47 Part 15 Subpart B • GB17625.1-2012; GB4943.1-2011; GB/T9254-2008
Protection rating	IP20 (IP45 front side only)
Warranty	3 years
Green compliance	ROHS-3, REACH, WEEE

Last updated: 07 May 2024

ENABLING BRIGHT OUTCOMES

BARCO