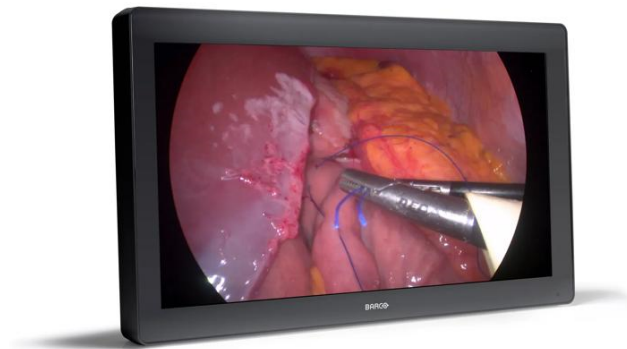
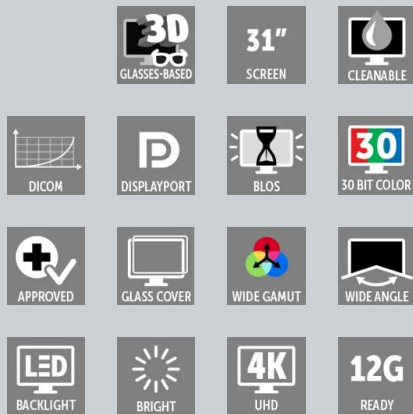


# MDFC-8232 3xB

4K UHD 3D display



- **Perfect match for FHD 3D endoscopy cameras**
- **BT.2020 & BT.709 compatible**
- **3G-SDI / HDMI™ options available**
- **3D ergonomic eye-shield included**
- **Medical-grade, easy to clean design**

MDFC-8232 is a 31-inch near-patient monitor, designed to address the increasing demand of the high-quality imaging that is typical of modern surgical environments.

The proprietary video processing and advanced color calibration algorithms, combined with a wide color gamut LCD, results in high color accuracy and detailed images, exempt from artifacts, and with near-zero latency for optimal hand-eye coordination.

In 2D mode, thanks to a resolution four times the conventional FHD, surgeons will benefit from richly detailed, color-correct images for UHD real-life patient's anatomy.

In 3D mode, through the supplied ergonomic kit, composed by a light-weight frame and a replaceable 3D eye-shield, multiple users at the same time will be able to see the same FHD content, with excellent depth perception even from different viewing angles and distances.

Available as either DP/HDMI™(MDFC-8232 3HB) or DP/SDI (MDFC-8232 3SB), this monitor is compatible with the most common 3D and 2D video formats typical of modern microscopes and laparoscopic camera systems.

The highly durable and scratch-resistant full-glass front surface, and the snap-in lockable connector cover, result in a clutter-free

and easy-to-clean design ideal for application in sterile environments. The front glass also minimizes reflection for better visibility. The designed in standard VESA-100 mounting plate allows easy mounting on surgical booms and spring arms.

MDFC-8232 3HB variant is designed to deliver optimal performance for moving images and videos, ensuring seamless performance without latency. It has limited support for static content in interlaced formats (e.g., 1920x1080i). For full interlacing support, we recommend Barco 12G variants, which offer enhanced compatibility and performance. Please refer to the user guide for detailed supported timings and configurations

White version on request

**Product specifications****MDFC-8232 3XB****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, BT.709
Viewing angle	178° Hor. / 178° Vert.
Luminance	Max: 450 cd/m <sup>2</sup> (typ.) Native Color space: 390 cd/m <sup>2</sup> calibrated default value @6500K: 360 cd/m <sup>2</sup> calibrated default value
Contrast ratio	1300:1 (typ.)
Response time	T on + T off (i.e. rise + fall): 20 ms (typ.)
White point	Native: 7200K Calibrated: 5600K, 6500K, 9300K
Gamma curve	1.8, Video, 2.2, 2.4, DICOM
3D viewing distance	Optimal: 1500 mm; Minimum: 686 mm
Vert. viewing angle	@ Min viewing distance: 15° Up/Down @ Optimal viewing distance: 8.0° Up/Down (crosstalk < 7%)
Lens type	Circular polarization: Left eye on top
Keyboard	Capacitive 7-key touch keyboard -Keyboard Enabling/Disabling membrane switch
Video inputs	2D Input signals: 4K-UHD inputs: 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 1x 12G-SDI 3840 x 2160 @ 60Hz (only 3SB) 1x HDMI2.0 3840 x 2160 @ 60Hz (only 3HB) FHD input (upscaled to 4K) 1x DVI 3D Input signals: 4K-UHD inputs: 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 1x 12G-SDI 3840 x 2160 @60Hz (only 3SB) 1x HDMI2.0 3840 x 2160 @ 60Hz (only 3HB) FHD input 2x 3G-SDI (dual stream)
Video outputs	2x 3G-SDI (3G-SDI input loop through) 1x DVI (4K display screen clone -downscaled to 1080i/1080p)
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 (In 2D mode: Display clone; in 3D mode: L/R view OSD selectable), FHD input upscaled to UHD, Legacy signals accepted, DC Power output, cable cover.

**Product specifications****MDFC-8232 3XB**

Multi-image support	(2D only) Picture-in Picture, Image Mirror and Rotation, Failover mode, Screen clone on DVI out, FHD input upscaled to UHD
Remote control	USB Type B port for FW download & control protocol
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
Power consumption	Maximum: 168W (Max) / 24V ± 10% Low power mode: TBC Power-off: ~ 1W
Dimensions (W x H x D)	778 x 473 x 93 mm / 30.6 x 18.6 x 3.6 in
Net weight	MDFC-8232 3Hx = 14.4 kg MDFC-8232 3Sx = 14.7 kg
Net weight packaged	20 kg
Mounting standard	100x100 & 200x100 mm VESA
Operating temperature	0° C~35° C
Storage temperature	-20° C~60° C
Operating humidity	10%~90% R.H.
Storage humidity	5%~90% R.H.
Certification and compliance	Regulation compliance: <ul style="list-style-type: none"><li>• ANSI/AAMI ES60601-1:2005/(R)2012</li><li>• CSA CAN/CSA-C22.2 NO. 60601-1:14</li><li>• IEC 60601-1 Edition 3.1 (2012)</li><li>• EN 60601-1: 2006 + CORR:2010 + A1:2013 + A12:2014</li><li>• IEC 60601-1-2 (2014)</li><li>• EN 60601-1-2 (2015)</li><li>• FCC CFR 47 Part 15 Subpart B</li><li>• GB17625.1-2012; GB4943.1-2011; GB/T9254-2008</li><li>• CE, c-UL-us, DEMKO, CCC</li></ul> Certifications: IP20 (IP45 front side only) Green compliance: ROHS-3, REACH, WEEE
Warranty	3 years

**Last updated: 03 Feb 2025**

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