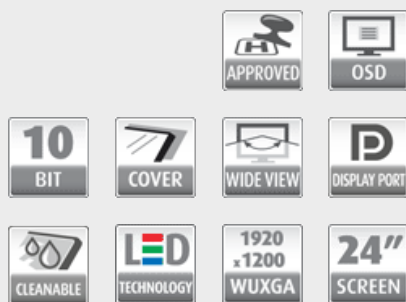


# MDSC-2224

## 24-inch full HD surgical display



Barco's MDSC-2224 is a 24-inch near-patient surgical display with LED backlight, featuring full HD resolution and a wide color gamut. Purpose-built for the operating room, the MDSC-2224 offers an easy-clean design, smart mechanics and the most detailed images in the procedure room today.

### **Color-calibrated, artifact-free images**

Thanks to its high brightness, high contrast and high resolution, the MDSC-2224 presents surgeons with accurate, realistic images and excellent depth perception. It also offers the fastest, lag-free transmission of surgical images and the highest image quality available today.

Our next-generation motion adaptive de-interlacing and noise reduction algorithms, using full 10-bit image processing, are your guarantee for detailed, sharp, and noise-free pictures, so you can detect the most subtle changes in tissue color.

### **Multi-source, multi-display imaging over IP**

With its broad input connectivity, the MDSC-2224 offers the highest flexibility for multi-modality imaging (PiP & PaP), enabling reproduction of images from multiple sources and to multiple displays in the integrated operating room.

The 24-inch display is one of Barco's network-enabled surgical displays and offers integrated functionality (optional) for use with Nexxis digital OR, ensuring smooth distribution of uncompressed video and data over the IP network without delay.

**BARCO**

Visibly yours

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## 24-inch full HD surgical display



### Designed for use in the operating room

Barco's MDSC-2224 allows easy cleaning and disinfection thanks to its smooth surface, splash-proof housing, and full screen protection. The fan-less design avoids the spread of contaminants.

The display comes with a smart cable management system that hides the cables for a clutter-free set-up. It is light and compact, allowing easy (dual-monitor) mounting on surgical booms and spring arms.



**Product specifications****MDSC-2224**

<b>Screen technology</b>	TFT AM LCD / S-IPS technology / LED backlight
<b>Active screen size (diagonal)</b>	611.3 mm (24")
<b>Active screen size (H x V)</b>	518.4 x 324 mm (20.4" x 12.7")
<b>Aspect ratio</b>	16:10
<b>Resolution</b>	1920 x 1200
<b>Pixel pitch</b>	0.270 mm
<b>Color imaging</b>	Yes
<b>Color support</b>	1073 million (10-bit)
<b>Color gamut</b>	Wide gamut (Adobe RGB 1998)
<b>Viewing angle</b>	178° Hor / 178° Ver
<b>Maximum luminance</b>	350 cd/m <sup>2</sup> (typical)
<b>Contrast ratio</b>	1000:1 (typical)
<b>Response time</b>	6 msec (GtG - typ)
<b>Dot clock</b>	(max) 165 Mhz
<b>Gamma curve</b>	Native, 1.8, 2.0, 2.2, 2.4, DICOM
<b>Housing color</b>	White RAL 9003
<b>Video inputs</b>	<p>Video input signals:</p> <ul style="list-style-type: none"><li>-DVI-I Single-Link (Digital &amp; Analog - HDMI video support with HDCP)</li><li>-Component Video RGBS / YPbPr (4xBNC)</li><li>-S-video (4-pin Mini DIN)</li><li>-Composite video (1xBNC)</li><li>-3G-SDI (1xBNC)</li><li>-DisplayPort (VESA std 1.1a)</li><li>-Optional: integrated BARCO Nexxis network adapter</li></ul> <p>Video input formats:</p> <ul style="list-style-type: none"><li>-VGA &amp; DVI: Up to 1920x1200 at 60Hz (reduced blanking)</li><li>Maximum pixel clock: 165MHz</li><li>Maximum Hor freq: 90kHz</li><li>Maximum Ver freq: 75Hz</li><li>-Standard PAL and NTSC for S-Video, Composite and Component</li><li>-Component YPbPr/ RGBS: HDTV - up to 1080i &amp; 1080p</li><li>-SDI Format Supported: 625/25 PAL, 525/29.97 NTSC, 1080i50, 1080i59.94, 1080i60, 720p50, 720p59.94, 720p60, 1080p50, 1080p59.94, 1080p60</li><li>-SDI Compliance: SMPTE 425M (Level A), SMPTE 424M, SMPTE 292M, SMPTE 259M-C, SMPTE 296M, ITU-R BT.656, ITU-R BT.601</li><li>-Displayport 1.1a: up to 1920 x 1200 60Hz</li></ul>
<b>Video outputs</b>	<p>DVI-D S-video (4-pin Mini DIN) Composite video (1xBNC) 3G-SDI (1xBNC)</p>
<b>Remote control</b>	RS-232 (D-sub 9-pin)
<b>Power requirements (nominal)</b>	<p>Power source for external power supply: 100 – 250 VAC / 47-63 Hz auto-switch Power source for display power input: +24 VDC / 2.5A Power supply for external module: +5VDC ±10% @500mA (max) through the DVI connectors DVI-in &amp; DVI-out (on pin 14 or pin 16 - OSD programmable)</p>
<b>Power management</b>	<p>DVI-DMPM states supported Power On state Active-Off state</p>
<b>Power consumption (nominal)</b>	less than 60 W (LED version)
<b>OSD languages</b>	English, French, German, Spanish, Italian
<b>Dimensions w/o stand (W x H x D)</b>	595 x 414 x 84 mm (23,4" x 16,3" x 3,3")
<b>Net weight w/o stand</b>	7.7 kg (17.0 lbs) without power supply
<b>Net weight packaged w/o stand</b>	10.0 kg (22.0 lbs)
<b>Mounting standard</b>	100 x 100 mm VESA
<b>Screen protection</b>	IP21 / Front face: IPx5 Double coated, anti-reflective PMMA / White RAL 9003
<b>Recommended modalities</b>	Endoscopy, laparoscopy, X-ray, CT, MR, US

## Product specifications

## MDSC-2224

<b>Regulation Compliance</b>	IEC60601 3rd Edition Approvals/Marking: CE, C-UL-US, DEMKO, CCC Safety (Medical equipment): IEC60601-1, UL60601-1, CSA-C22.2 nr 601-1-M90 Electromagnetic Compatibility: EMC Medical EMC Standards: IEC60601-1-2, EN55011 /CISPR 11, FCC CFR47 part 15 & 18/Class A Environment: ROHS-2, REACH, WEEE compliant
<b>Temperature</b>	Operating: 0° - 40° C / Storage: -20° - 60° C
<b>Humidity</b>	Operating: 10% - 90% R.H. / Storage: 5% - 90% R.H.
<b>Keyboard/mouse</b>	Touch-sensitive, 7-key, backlit, bottom-right
<b>Supplied accessories</b>	User Manual, DVI Dual-Link cable 3.0m, Mains cables ( EU (CEBEC/KEMA) & US (Hospital grade UL)), External power supply
<b>Optional accessories</b>	Barco Surgical LCD Display Desk Stand, Barco MDSC Surgical Medical LCD Display Extension Cable 10m
<b>Warranty</b>	3 years