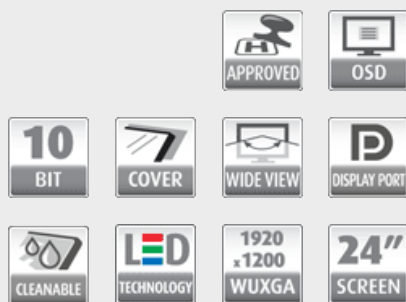# MDSC-2224
24-inch full HD surgical display

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.

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MDSC-2224

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

Screen technology	TFT AM LCD / S-IPS technology / LED backlight
Active screen size (diagonal)	611.3 mm (24")
Active screen size (H x V)	518.4 x 324 mm (20.4" x 12.7")
Aspect ratio	16:10
Resolution	1920 x 1200
Pixel pitch	0.270 mm
Color imaging	Yes
Color support	1073 million (10-bit)
Color gamut	Wide gamut (Adobe RGB 1998)
Viewing angle	178° Hor / 178° Ver
Maximum luminance	350 cd/m² (typical)
Contrast ratio	1000:1 (typical)
Response time	6 msec (GtG - typ)
Dot clock	(max) 165 Mhz
Gamma curve	Native, 1.8, 2.0, 2.2, 2.4, DICOM
Housing color	White RAL 9003
Video inputs	Video input signals: -DVI-I Single-Link (Digital & Analog – HDMI video support with HDCP) -Component Video RGBS / YPbPr (4xBNC) -S-video (4-pin Mini DIN) -Composite video (1xBNC) -3G-SDI (1xBNC) -DisplayPort (VESA std 1.1a) -Optional: integrated BARCO Nexxis network adapter Video input formats: -VGA & DVI: Up to 1920x1200 at 60Hz (reduced blanking) Maximum pixel clock: 165MHz Maximum Hor freq: 90kHz Maximum Ver freq: 75Hz -Standard PAL and NTSC for S-Video, Composite and Component -Component YPbPr/ RGBS: HDTV - up to 1080i & 1080p -SDI Format Supported: 625/25 PAL, 525/29.97 NTSC, 1080i50, 1080i59.94, 1080i60, 720p50, 720p59.94, 720p60, 1080p50, 1080p59.94, 1080p60 -SDI Compliance: SMPTE 425M (Level A), SMPTE 424M, SMPTE 292M, SMPTE 259M-C, SMPTE 296M, ITU-R BT.656, ITU-R BT.601 -Displayport 1.1a: up to 1920 x 1200 60Hz
Video outputs	DVI-D S-video (4-pin Mini DIN) Composite video (1xBNC) 3G-SDI (1xBNC)
Remote control	RS-232 (D-sub 9-pin)
Power requirements (nominal)	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 & DVI-out (on pin 14 or pin 16 - OSD programmable)
Power management	DVI-DMPM states supported Power On state Active-Off state
Power consumption (nominal)	less than 60 W (LED version)
OSD languages	English, French, German, Spanish, Italian
Dimensions w/o stand (W x H x D)	595 x 414 x 84 mm (23,4" x 16,3" x 3,3")
Net weight w/o stand	7.9 kg / 17.4 lbs (MDSC-2224 LED) 8.3 kg / 18.3 lbs (MDSC-2224 MNA)
Net weight packaged w/o stand	10.0 kg (22.0 lbs)
Mounting standard	100 x 100 mm VESA
Screen protection	IP21 / Front face: IPx5 Double coated, anti-reflective PMMA / White RAL 9003

Product specifications	MDSC-2224
Recommended modalities	Endoscopy, laparoscopy, X-ray, CT, MR, US
Regulation Compliance	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
Temperature	Operating: 0° - 40° C / Storage: -20° - 60° C
Humidity	Operating: 10% – 90% R.H. / Storage: 5% – 90% R.H.
Keyboard/mouse	Touch-sensitive, 7-key, backlit, bottom-right
Supplied accessories	User Manual, DVI Dual-Link cable 3.0m, Mains cables (EU (CEBEC/KEMA) & US (Hospital grade UL)), External power supply
Optional accessories	Barco Surgical LCD Display Desk Stand, Barco MDSC Surgical Medical LCD Display Extension Cable 10m
Warranty	3 years

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