

Nio Color 5MP (MDNC-6121)

5.8 MP high-bright color display



- Designed for radiology and mammography
- High-bright, steady colors and grays
- Front sensor and QAWeb Enterprise for always-on compliance

Nio Color 5MP offers super bright, color calibrated and the most detailed medical images, including mammography and breast tomosynthesis. It's how we help you improve your workflow and make more confident diagnoses.

No detail goes unnoticed

Barco's Nio Color 5MP renders excellent color and grayscale images used in general radiology as well 2D and 3D mammography. Its high brightness and high contrast ratio help you discern the most subtle image details for an accurate diagnosis. And the additional resolution allows you to fit more of the image on the screen for reduced panning and zooming.

Using Barco's integrated front sensor, the Nio Color 5MP works perfectly together with Barco's QAWeb Enterprise solution for automated Quality Assurance and calibration. QAWeb Enterprise guarantees stable DICOM grayscale images and, with SteadyColor, consistent calibrated color images throughout the display's lifetime.

Work smarter

With the integrated smart features, you can easily take control and improve your productivity. SpotView™, for example, allows you to focus on an area of interest to unveil even more details. And with DimView™, auxiliary displays can be dimmed automatically so they don't interfere with your reading experience.

The Nio Color 5MP is an excellent solution for radiologists who want to angle their desktop: it lets you choose your preferred viewing angle and offers a highly ergonomic display configuration. It's also possible to switch between Clearbase and Bluebase viewing modes on-the-fly. Whether to suit the image type or to change reading preferences, you decide which color you want, and when.

Ultimate peace of mind



Thanks to the high-performance LED backlights, the Nio Color 5MP has a positive impact on both maintenance and operational costs. The display is equipped with an integrated glass cover to safeguard your investment.

Barco is the only company that provides complete system solutions, from display and controllers to workflow tools and calibration via QAWeb. All components are covered by our full 5-year warranty. At product release, we extensively test our displays' compatibility with all major PACS applications.

Ensuring diagnostic confidence with MDR Class IIa

Our radiology displays are MDR-certified as Class IIa. Their product information has been reviewed and cleared by independent medical and technical experts, and is audited yearly. In other words, we ensure diagnostic confidence and peace of mind for our users.

A ecolabel for Nio Color 5MP

The Nio Color 5MP has been subjected to Barco's ecoscoring protocol and has received an A rating. Some key factors that contributed to this rating are:

- Energy efficient power supply, energy efficient standby and off modes
- Possibility to switch to standby mode when device is not in use
- Halogen-free cables and plastics
- Use of recycled cardboard in packaging (>85% recycled content)
- Product design optimized for disassembly with common tools

Product specifications**NIO COLOR 5MP (MDNC-6121)****General specifications**

Power consumption	60 W (nominal) < 0.5 W (standby)
Screen technology	LCD
Active screen size (diagonal)	541 mm (21.3")
Active screen size (H x V)	324.45 x 432.6 xmm (12.77" x 17")
Aspect ratio (H:V)	3:4 for each display in portrait mode, 3:2 overall
Resolution	5.8MP (2100 x 2800 pixels)
Pixel pitch	0.1545 mm
Color imaging	Yes
Gray imaging	Yes
Bit depth	30 bit
Viewing angle (H, V)	178°
Uniformity correction	ULT
SteadyGray	Yes
SteadyColor Calibration	Yes, when used as system with MXRT display controller
I-Luminate	Yes
Ambient Light Compensation (ALC)	Yes
Front sensor	Yes
Maximum luminance	1300 cd/m ²
DICOM calibrated luminance	600 cd/m ²
Contrast ratio (panel typical)	1400:1
Response time ((Tr + Tf)/2) (typical)	12.5 ms
Housing color	RAL 9003 / RAL 9004
Video input signals	DVI-D Dual Link (2x), DisplayPort(2x)
USB ports	1x USB 2.0 upstream (endpoint) 2x USB 2.0 downstream
Power rating	24 VDC, 5 A; 5 VDC, 0.1 A
Power requirements	This device shall only be powered by the following medical approved power supply: Adapter Technology, type CMD160-P240 Ratings marked on the medical power supply: -Input rating: 100–240 VAC, 1.9–0.8 A, 50/60 HZ -Output rating: 24 VDC, 6.3 A; 5 VDC, 0.5 A
Dimensions with stand (W x H x D)	Portrait: 378 x 528~628 x 235 mm Landscape: 491 x 472~572 x 235 mm
Dimensions w/o stand (W x H x D)	Portrait: 378 x 491 x 84 mm Landscape: 491 x 378 x 84 mm
Dimensions packaged (W x H x D)	500 x 280 x 670 mm
Net weight with stand	[MDNC-6121] 11.6 kg [MDNC-6121 NC] 10.2 kg
Net weight w/o stand	[MDNC-6121] 6.6 kg [MDNC-6121 NC] 5.2 kg
Net weight packaged	[MDNC-6121] 17 kg (without optional accessories) [MDNC-6121 NC] 15.7 kg (without optional accessories)
Tilt	-10° to 30°
Swivel	-45° to +45°
Pivot	90°
Height adjustment range	100 mm
Mounting standard	VESA (100 mm)
Screen protection	[MDNC-6121] Protective cover: yes Anti-Reflective coating: yes Material: glass [MDNC-6121 NC] Protective cover: no Anti-Reflective coating: no Material: NA
Recommended modalities	All digital images, including digital mammography.

Product specifications

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Certifications	FDA 510(K) K170476 for General Radiology, Digital Mammography and Breast Tomosynthesis CE0123 (Medical Device) CCC (China), KC (Korea), INMETRO (Brazil -K9300360B, K9300361B), BIS (India) EAC (Russia, Kazakhstan, Belarus, Armenia and Kyrgyzstan) Safety specific: IEC 60950-1:2005+A1:2009+A2:2013 EN 60950-1:2006+A1:2010+A11:2009+A12:2011+A2:2013 IEC 62368-1:2018 EN IEC 62368-1:2020+A11:2020 IEC 60601-1:2005+A1:2012+A2:2020 EN 60601-1:2006+A1:2013+A12:2014+A2:2021 AAMI ES 60601-1:2005+A1:2012+A2:2021 CAN/CSA C22.2 No. 60601-1:2014 (Reaffirmed 2022) EMI specific: IEC 60601-1-2:2014+A1:2020 (Ed.4.1) EN 60601-1-2:2015+A1:2021 (Ed.4.1) FCC part 15 Class B ICES-001 Level B VCCI (Japan) Environmental EU RoHS, China RoHS, REACH, Canada Health, WEEE, Packaging Directive
Supplied accessories	User Guide Documentation disk System sheet Video cable (1x DisplayPort) Mains cable(s) USB 2.0 cable External power supply
Optional accessories	Graphics board
QA software	QAWeb
Warranty	5 years, including 40000 hours backlight warranty
Operating temperature	0 °C to 40 °C (15 °C to 30 °C within specs)
Storage temperature	-20 °C to 60 °C
Operating humidity	8 % to 80 % (non-condensing)
Storage humidity	5 % to 85 % (non-condensing)
Operating pressure	70 kPa
Storage pressure	50 to 106 kPa

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