

Nio Color 5.8MP (MDNC-6121)

Updated 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
- One-touch KVM switching
- Enhanced ambient light sensing and control

Nio Color 5.8MP 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 5.8MP 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 5.8MP 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 5.8MP 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 5.8MP 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.

Ecolabel for Nio Color 5.8MP

The Nio Color 5.8MP has been subjected to Barco's ecoscoring protocol. 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

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General Specifications

Screen technology	LCD
Active screen size (diagonal)	541 mm (21.3")
Active screen size (H x V)	324 x 433 mm (12.77" x 17")
Aspect ratio (H:V)	3:4 for each display in portrait mode, 3:2 overall
Resolution	5.8 MP (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	Yes, when used as a system with Barco Display Controller, video driver and QAWeb Enterprise
Color gamut NTSC	72.2%
Color gamut sRGB	101.9%
Color gamut DCI-P3	75.5%
sRGB Delta E2000 (typical)	Average: < 3, Max: < 5
I-Luminate	Yes
Ambient light presets	Yes, reading room selection
Ambient light sensor	Yes
Front sensor	Yes, I-Guard
Maximum luminance (panel typical)	1560 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	Black (RAL 9004) / White (RAL 9003)
Video input signals	2x DisplayPort 1.4
USB ports	2 x USB-B 2.0 upstream (endpoint) 5 x USB-A 2.0 downstream (of which 1 charge port)
KVM switch	Yes
Power rating	24 VDC, 5 A
Power requirements	This device shall only be powered by the medical approved power supply of AdapterTech., type ATM160T-P240 Input: 100-240 Vac, 50-60 Hz, 1.8-0.9 A Output: 24 Vdc, 6.6 A
Power consumption	60 W (nominal) 0.4 W (hibernate) 0.4 W (switched off)
Dimensions with stand (W x H x D)	Portrait: 378 x 528~628 x 235 mm Landscape: 491x 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	With protective cover: 11.9 kg Without protective cover: 10.6 kg
Net weight w/o stand	With protective cover: 6.9 kg Without protective cover: 5.6 kg
Net weight packaged	With protective cover: 16.9 kg (without optional accessories) Without protective cover: 15.6 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	Protective, anti-reflective glass (optional)
Recommended modalities	All digital images, including digital mammography.

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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), BIS (India) Safety specific: 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 disc System sheet Video cable (1x DisplayPort) Mains cable(s) USB cable External power supply
Optional accessories	Graphics board
QA software	QAWeb Enterprise
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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