

Nio Color 3MP (MDNC-3421)

3MP high-bright color display



- **Best image quality on the market for 3MP color**
- **Automated Quality Assurance and calibration for stable DICOM images**
- **Fully-tested system solution from a single source, for ultimate peace of mind**

Nio Color 3MP is a 3 megapixel high-bright color display system with LED backlights, providing excellent image quality for confident diagnoses. Its exceptional brightness (calibrated at 500 cd/m²) helps you discern even the tiniest detail - even after many years of use.

The best 3MP color solution on the market

The new Nio Color 3MP offers the best image quality in the market for a 3MP color solution. Its high brightness and high contrast ratio enable you to unveil even the subtlest details and make accurate diagnoses. 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™, any auxiliary displays can be automatically dimmed. The Nio Color 3MP is also an excellent solution for radiologists who want to angle their desktop: it lets you choose your preferred viewing angle and offers highly ergonomic display configuration.

Stable image quality, durable investment

Using Barco's integrated front sensor, the Nio Color 3MP works perfectly with Barco's online MediCal QAWeb solution for automated Quality Assurance and calibration. QAWeb guarantees stable DICOM images throughout the display's lifetime. By default, Barco displays are equipped with a protective cover to safeguard your investment. Thanks to the high-performance LED backlights, the Nio Color 3MP requires less power, even at higher calibrated luminance. This has a positive impact on both maintenance and operational costs.

Ultimate peace of mind

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, Barco extensively tests the displays compatibility with all major PACS applications.

- High-bright and power-efficient LED backlights
- Accurate grayscale and color rendering
- Front sensor and MediCal QAWeb for easy DICOM conformance
- High-performance 3D rendering with full 3D, OpenGL and DirectX support

PRODUCT SPECIFICATIONS**NIO COLOR 3MP (MDNC-3421)**

Screen technology	IPS-TFT Color LCD
Active screen size (diagonal)	540 mm (21.3")
Active screen size (H x V)	432 x 324 mm (17.0 x 12.8")
Aspect ratio (H:V)	4:3
Resolution	3MP (2048 x 1536 pixels)
Pixel pitch	0.2109 mm
Color imaging	Yes
Gray imaging	Yes
Bit depth	30 bit
Viewing angle (H, V)	178°
Uniformity correction	ULT
Ambient light presets	Yes, reading room selection
Backlight Output Stabilization (BLOS)	No
Front sensor	Yes
Maximum luminance (panel typical)	900 cd/m ²
DICOM calibrated luminance	500 cd/m ²
Contrast ratio (panel typical)	1400:1
Response time (Tr + Tf) (typical)	20 ms
Housing color	RAL 9003 / RAL 9004
Video input signals	DVI-D Dual Link DisplayPort
USB ports	1x USB 2.0 upstream (endpoint) 3x USB 2.0 downstream
Power requirements	External power supply (100-240 Vac, 47-63 Hz)
Power consumption	50 W (nominal) < 0.5 W (standby)
OSD languages	English, German, French, Dutch, Spanish, Italian, Portuguese, Polish, Russian, Swedish, Chinese (simplified), Japanese, Korean, Arabic
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	11.2 kg
Net weight w/o stand	6.2 kg
Net weight packaged	15.7 kg (without 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 cover
Recommended modalities	All digital images, except digital mammography

PRODUCT SPECIFICATIONS**NIO COLOR 3MP (MDNC-3421)****Certifications**

FDA 510(K) K170837 for General Radiology
CE0120 (MDD 93/42/EEC; A1:2007/47/EC class IIb product)
CCC (China), KC (Korea), PSE (Japan), Inmetro (Brazil), BIS (India), EAC (Russia, Kazakhstan, Belarus, Armenia and Kyrgyzstan)

Safety specific:
IEC 60950-1:2005 + A1:2009
EN 60950-1:2006 + A1:2010 + A11:2009 + A12:2011 + A2:2013
IEC 60601-1:2005 + A1:2012
EN 60601-1:2006 + A1:2013 + A12:2014
ANSI/AAMI ES 60601-1:2005 + R1:2012
CAN/CSA C22.2 No. 60601-1:14

EMI specific:
IEC 60601-1-2:2014 (ed4)
EN 60601-1-2:2015 (ed4)
FCC part 15 Class B
ICES-001 Level B
VCCI (Japan)

Environmental:
China Energy Label, EU RoHS, China RoHS, REACH, Canada Health, WEEE, Packaging Directive

Supplied accessories

User guide
Documentation disc
System disc
Video cable (1 x DisplayPort)
Mains cables (UK, European (CEBEC/KEMA), USA (UL/CSA; adaptor plug NEMA515P), Chinese (CCC))
USB 2.0 cable
External power supply

Optional accessories

Graphics board

QA software

MediCal QAWeb

Warranty

5 years, including 20000 hrs backlight warranty

Operating temperature

0 °C to 40 °C (15 °C to 35 °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 minimum

Storage pressure

50 to 106 kPa

Last updated: 27 Feb 2019

Technical specifications are subject to change without prior notice. Please check www.barco.com for the latest information.