

# 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/m<sup>2</sup>) 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 QAWeb Enterprise solution for automated Quality Assurance and calibration. QAWeb Enterprise 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 Enterprise. 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 QAWeb Enterprise 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 <sup>2</sup>
DICOM calibrated luminance	500 cd/m <sup>2</sup>
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 rating	24 VDC, 4 A
Power requirements	This device shall only be powered by the following medical approved power supplies:  Sinpro Electronics, type CPU110-201 Ratings marked on the medical power supply: ■ Input rating: 100–240 VAC, 1.5 A, 47–63 Hz ■ Output rating: 24 VDC, 4.58 A  Efore (Roal Electronics), type RHPS390A Ratings marked on the medical power supply: ■ Input rating: 100–240 VAC, 3.0 A, 50/60 Hz ■ Output rating: 24 VDC, 8.33 A
Power consumption	50 W (nominal) < 0.5 W (standby)
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	With protective cover: 11.2 kg Without protective cover: 10.7 kg
Net weight w/o stand	With protective cover: 6.2 kg Without protective cover: 5.7 kg

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

<b>Net weight packaged</b>	With protective cover: 15.7 kg (without accessories) Without protective cover: 15.2 kg (without accessories)
<b>Tilt</b>	-10° to +30°
<b>Swivel</b>	-45° to +45°
<b>Pivot</b>	90°
<b>Height adjustment range</b>	100 mm
<b>Mounting standard</b>	VESA (100 mm)
<b>Screen protection</b>	Protective, anti-reflective glass cover (optional)
<b>Recommended modalities</b>	All digital images, except digital mammography
<b>Certifications</b>	FDA 510(K) K170837 for General Radiology CE1639 (Medical Device) 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
<b>Supplied accessories</b>	User guide Documentation disc System sheet Video cable (1 x DisplayPort) Mains cable(s) USB 2.0 cable External power supply
<b>Optional accessories</b>	Graphics board
<b>QA software</b>	QAWeb
<b>Warranty</b>	5 years, including 20000 hrs backlight warranty
<b>Operating temperature</b>	0 °C to 40 °C (15 °C to 35 °C within specs)
<b>Storage temperature</b>	-20 °C to 60 °C
<b>Operating humidity</b>	8% to 80% (non-condensing)
<b>Storage humidity</b>	5% to 85% (non-condensing)
<b>Operating pressure</b>	70 kPa minimum
<b>Storage pressure</b>	50 to 106 kPa

Last updated: 24 Jun 2022

Technical specifications are subject to change without prior notice. Please check [www.barco.com](http://www.barco.com) for the latest information.