

Nio Color 3MP (MDNC-3421CN)

3MP high-bright color display



- **Best image quality on the market for 3MP color**
- **Automated QA and calibration for stable DICOM images**
- **Fully-tested system solution**

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.

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.

- 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-3421CN)**

General specifications	
Screen technology	IPS
Active screen size (diagonal)	540 mm (21.3")
Active screen size (H x V)	433 x 325 mm (17.0 x 12.8")
Aspect ratio (H:V)	4:3
Resolution	3MP (2048 x 1536 pixels)
Pixel pitch	0.2115 mm
Color imaging	Yes
Gray imaging	Yes
Bit depth	30 bit
Viewing angle (H, V)	178°
Optical glass	MDNC-3421 (option CN): Yes MDNC-3421 (option CN NC): No
Uniformity correction	ULT
Ambient light presets	Yes, reading room selection
Front sensor	Yes
Maximum luminance (panel typical)	1000 cd/m ²
DICOM calibrated luminance	500 cd/m ²
Contrast ratio (panel typical)	1400:1
Response time ((Tr + Tf)/2) (typical)	15 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 @ 4.58A, 5 VDC @ 0.5A
Power requirements	This device shall only be powered by the medical approved power supply of Sinpro Electronics, type CPU110-201 Ratings marked on the medical power supply: <ul style="list-style-type: none">■ Input rating: 100–240 VAC, 1.5–0.6 A, 47-63 HZ■ Output rating: 24 VDC, 4.58 A; 5 VDC, 0.5 A
Power consumption	50 W (nominal) < 0.5 W (hibernate) < 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	MDNC-3421 (option CN): 11.5 kg MDNC-3421 (option CN NC): 10.2 kg
Net weight w/o stand	MDNC-3421 (option CN): 6.5 kg MDNC-3421 (option CN NC): 5.2 kg
Net weight packaged	MDNC-3421 (option CN): 15.6 kg (without accessories) MDNC-3421 (option CN NC): 14.3 kg (without accessories)
Tilt	-10° to +30°

Product specifications**NIO COLOR 3MP (MDNC-3421CN)**

Swivel	-45° to +45°
Pivot	90°
Height adjustment range	100 mm
Mounting standard	VESA (100 mm)
Screen protection	MDNC-3421 (option CN): Protective, anti-reflective glass cover MDNC-3421 (option CN NC): N/A
Recommended modalities	All digital images, except digital mammography
Certifications	CCC GB92542008+ GB4943.12011+ GB17625.12003 China RoHS
Supplied accessories	User guide Documentation disc System disc Video cable (1 x DisplayPort) Mains cable (Chinese (CCC)) USB 2.0 cable External power supply
Optional accessories	Graphics board
QA software	MediCal QAWeb
Warranty	5 years, including 35000 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

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