

Nio 3MP (MDNG-3421CN)

3MP diagnostic grayscale display system



- High brightness to see more detail
- Automated Quality Assurance and calibration
- Fully-tested system solution

Nio® 3MP is ideal for high-quality imaging of diagnostic grayscale modalities. This display system comes with LED backlights for higher brightness and a unique front-of-screen sensor for excellent image quality at all times. These and other innovative features make your image look the best it can.

Confident reading

Equipped with high-bright LED backlights, Nio 3MP delivers excellent brightness and more shades of gray to detect subtle details more quickly. The unique front-of-screen sensor ensures you see consistent and precise images, calibrated at 500 cd/m², for confident diagnoses.

On-demand image quality checks

The front-of-screen sensor on Nio 3MP, which works seamlessly with Barco's online MediCal QAWeb solution for automated Quality Assurance and on-demand calibration, makes sure you are viewing perfect DICOM images.

Improved productivity

The Nio 3MP includes seamlessly integrated technologies and features to boost functionality and performance so 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.

An excellent investment

Using energy-efficient LED backlights, Nio 3MP is as low in power consumption as it is high in brightness. Because it uses less power, the display produces less heat and requires less cooling, which impacts maintenance and operational costs. Additionally, the LED backlights offer a long lifetime - even at high brightness - providing an excellent return on your investment.

- Front sensor and QAWeb for easy DICOM compliance
- High brightness unveils more details in the image
- Lowest cost of ownership

Product specifications

NIO 3MP (MDNG-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	No
Gray imaging	Yes
Bit depth	10 bit
Viewing angle (H, V)	178°
Uniformity correction	ULT
Ambient light presets	Yes, reading room selection
Front sensor	Yes
Maximum luminance (panel typical)	2000 cd/m ²
DICOM calibrated luminance	500 cd/m ²
Contrast ratio (panel typical)	1500:1
Response time ((Tr + Tf)/2) (typical)	14 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
KVM switch	No
Power rating	24 VDC @ 4.58A, 5 VDC @ 0.5A
Power requirements	This device shall only be powered by the following medical approved power supply: 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 A, 47–63 Hz ▪ Output rating: 24 VDC, 4.58 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	MDNG-3421 (option CN): 11.3 kg MDNG-3421 (option CN NC): 10.0 kg
Net weight w/o stand	MDNG-3421 (option CN): 6.3 kg MDNG-3421 (option CN NC): 5.0 kg
Net weight packaged	MDNG-3421 (option CN): 15.4 kg (without accessories) MDNG-3421 (option CN NC): 14.1 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	MDNG-3421 (option CN): Protective, anti-reflective glass cover MDNG-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 45000 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: 04 Jul 2024

© 2024 Barco nv. All rights reserved. Reproduction in whole or in part without written permission is prohibited. All brand names and product names are trademarks, registered trademarks or tradenames of their respective holders. Due to continued innovation, information and technical specifications are subject to change without prior notice. Please check www.barco.com for the latest specifications.