Nio 5MP LED (MDNG-5221)

5MP diagnostic grayscale display system

GLASS COVER	5Y WARRANTY	DISPLAYPORT	10 BIT
SMOOTHGRAY	ULT	QAWEB	FRONT SENSOR
LED TECHNOLOGY	GRAYSCALE	21" SCREEN	5 MP

- **Grayscale medical display with 2560 x 2048 resolution**

- **Barco LED technology to unveil the subtlest details**

- **Front sensor for on-demand image quality check**

- **Cleared for mammography**

FDA-cleared for radiology and mammography viewing and featuring a number of unique imaging technologies, Nio 5MP LED provides excellent image quality for confident diagnoses.

Thanks to the high-bright LED backlights, Nio 5MP LED helps you see more shades of gray. Additionally, Uniform Luminance Technology ensures subtle details become more noticeable more quickly, resulting in reduced windowing and leveling time.

Quality assured

The unique front-of-screen sensor guarantees consistent and precise images at all times. It works seamlessly with Barco's QAWeb Enterprise software for automated Quality Assurance and on-demand calibration, so you are viewing perfect DICOM images.

High return

Using energy-efficient LED backlights, Nio 5MP LED 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.

- High-bright and power-efficient LED backlights

- Accurate grayscale rendering

- Front sensor and QAWeb Enterprise for easy DICOM conformance

- High-performance 3D rendering with full 3D, OpenGL and DirectX support

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Product specifications	NIO 5MP LED (MDNG-5221)
General specifications	
Screen technology	Dual domain IPS, Normally Black
Active screen size (diagonal)	541 mm (21.3")
Active screen size (H x V)	459.8 x 375.3 mm (18.1" x 14.77")
Aspect ratio (H:V)	5:4
Resolution	5 MP (2560 x 2048 pixels)
Pixel pitch	0.165 mm
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	1020 cd/m²
DICOM calibrated luminance	600 cd/m²
Contrast ratio (panel typical)	1200:1
Response time ((Tr + Tf)/2) (typical)	12.5 ms
Housing color	RAL 9003 / RAL 9004
Video input signals	DVI DisplayPort
USB ports	1x USB 2.0 upstream (endpoint) 3x USB 2.0 downstream
Power rating	24 VDC, 4 A; 5 VDC, 0.5 A
Power requirements	This device shall only be powered by the following medical approved power supply: Sinpro, type CPU110-201 Ratings marked on the medical power supply: ■ 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	43 W (nominal) < 0.5 W (hibernate) < 0.5 W (standby)
Dimensions with stand (W x H x D)	Portrait: 407 x 523~623 x 235 mm Landscape: 493.5 x 479~579 x 235 mm
Dimensions w/o stand (W x H x D)	407 x 494 x 84 mm
Dimensions packaged (W x H x D)	676 x 565 x 317 mm
Net weight with stand	13.25 kg
Net weight w/o stand	8.25 kg
Net weight packaged	19.61 kg (without optional accessories)
Tilt	-10° to +30°
Swivel	-45° to +45°
Pivot	0° to 90°

Product specifications	NIO 5MP LED (MDNG-5221)
Height adjustment range	100 mm
Mounting standard	VESA (100 mm)
Screen protection	Protective, anti-reflective glass cover
Recommended modalities	All digital images, including digital mammography
Certifications	FDA 510(K) K133984 for General Radiology CE1639 (Medical Device Class IIb) 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 Video cable (1 x DisplayPort) USB 2.0 cable Mains cables (UK, European (CEBEC/KEMA), USA (UL/CSA; adaptor plug NEMA5-15P), Chinese (CCC)) External power supply
Optional accessories	Graphics board
QA software	QAWeb
Warranty	5 years, including 45000 hrs 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	50 kPa minimum
Storage pressure	50 to 106 kPa

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