

Nio Fusion 12MP (MDNC-12130)

Diagnostic versatility at your fingertips



- **Multimodality display for PACS and breast imaging**
- **12MP screen resolution and Uniform Luminance Technology**
- **Accurate and consistent colors and greyscales**
- **Integrated tools to support workflow and improve ergonomics**
- **Automated QA and compliance tests**

A versatile diagnostic display, for both PACS and breast imaging

The Nio Fusion 12MP (MDNC-12130) display is designed to combine PACS and breast images on one workstation, so you don't need to work on a cluttered desk with complex configurations and multiple portrait displays. A Nio Fusion 12MP will represent both 2D and 3D images fluidly, brightly and in detail, further helping you to speed up your reading sessions. A set of unique integrated tools improve reading ergonomics and support efficient workflow for static and dynamic imaging.

- Medical display
- Excellent uniformity correction
- Perfect representation of calibrated colors and greyscales

Enjoy consistent and compliant colors and greyscales

With a 12MP resolution, you'll fit multiple images on one screen and enjoy every single one in extremely sharp and precise quality, with less panning and zooming. Nio Fusion 12MP displays are calibrated to meet the DICOM standard for greyscales. And thanks to the SteadyColor™ technology, you can also confidently rely on perceptually linear colors.

Barco's QAWeb Enterprise software, included in the display, guarantees consistent image quality through automated calibration and QA, and also enables compliance to the latest regional and international regulations for image quality.

Read on a flexible display, with optimal comfort

The Nio Fusion 12MP is surprisingly thin and light. It mirrors most of a human's natural field of vision and was designed to reduce head, hand and eye movements to a minimum. You can even switch between two workstations in no time, at the touch of a button with integrated KVM (Keyboard-Video-Mouse).

- Reflection-free surface enhances image sharpness
- SoftGlow ambient lighting reduces eye fatigue
- Uniform Luminance Technology ensures constant luminance in all regions of the screen
- Ambient Light Sensor and Compensation provide consistent images in any lighting conditions



A future-proof investment that lasts

The Nio Fusion 12MP is an all-in-one imaging solution, for both PACS and breast imaging, which will make it possible for you to save operational costs. Its smooth, fast system was designed to support you in your workflow, enabling you to see more patients. And last but not least, thanks to its long lifetime, the display can be your companion for years to come. All its components are warranted for 5 years.

Ensuring diagnostic confidence with MDR Class IIa

Our radiology displays are MDR-certified as Class IIa. Their product information has been reviewed and cleared by independent medical and technical experts, and is audited yearly. In other words, we ensure diagnostic confidence and peace of mind for our users.

Technologies that enhance image quality:

- Uniform Luminance Technology to ensure that all regions of the screen have an even luminance
- SteadyColor™ calibration technology to meet the DICOM standard for greyscales and to guarantee consistent, perceptually linear color
- SteadyGray™ ensures that all gray values closely match the selected white tint. This can be blue base, clear base, or some other preferred white tint
- QAWeb Enterprise, a cloud-based technology for automated calibration and Quality Assurance
- I-Guard™ front sensor to ensure 24/7 compliance to image quality standards and guidelines
- Efficient DuraLight™ backlights for a long lifetime of brighter images

Technologies that enhance productivity:

- RapidFrame™ to ensure crisp and in-focus moving images, with up to 10% higher detection of small details in moving images*
- Conference CloneView™ software to project and control images on a large screen with ease
- SoftGlow™ task and wall lighting to improve reading room conditions
- SpotView™ to highlight subtle details in a region of interest
- KVM to switch effortlessly between two workstations

A+ ecolabel for Nio Fusion 12MP

The Nio Fusion 12MP has been subjected to Barco's ecoscoring protocol and has received an A+ rating. Some key factors that contributed to this rating are:

- Automatic standby mode when device is not in use
- 100% halogen-free PCBs, internal cables and plastic parts >25g
- Packaging optimized for logistics
- Product design optimized for disassembly
- Large plastic parts unpainted

*Marchessoux, C., et al. (2011). Validation of New Digital Breast Tomosynthesis Medical Display. Proceedings of SPIE, 7966, 79660R, 2011.

Product specifications**NIO FUSION 12MP (MDNC-12130)****General specifications**

Screen technology	LCD
Active screen size (diagonal)	784 mm (30.9")
Active screen size (H x V)	653 x 435 mm (25.7 x 17.1")
Aspect ratio (H:V)	3:2
Resolution	Native 12MP (4200 x 2800 pixels) Configurable to 2 x 5.8MP (2100 x 2800 pixels)
Pixel pitch	0.1554 mm
Color imaging	Yes
Gray imaging	Yes
Bit depth	30 bit
Viewing angle (H, V)	178°
Uniformity correction	ULT
SteadyGray	Yes (in display), when used with system components as outlined in the user guide
SteadyColor	Yes (in display), when used with system components as outlined in the user guide
Ambient light presets	Yes, reading room selection
Ambient light sensor	Yes
Front sensor	Yes
Maximum luminance (panel typical)	1200 cd/m ²
DICOM calibrated luminance	MDNC-12130: 600 cd/m ²
Contrast ratio (panel typical)	1500:1
Response time ((Tr + Tf)/2) (typical)	10 ms (average, with all single transitions within 1 frame period)
Housing color	Black / White
Video input signals	2x DisplayPort 1.2
Video output signals	N/A
USB ports	2x USB-B 2.0 upstream (switchable endpoint) 2x USB-A 2.0 downstream
KVM switch	Yes
Power rating	100-240 Vac, 50/60 Hz, 3.6-1.6 A
Power consumption	105 W (nominal) < 0.5 W (hibernate) < 0.5 W (standby)
Dimensions with stand (W x H x D)	695 x 528~628 x 239 mm
Dimensions w/o stand (W x H x D)	695 x 483 x 74 mm
Dimensions packaged (W x H x D)	800 x 650 x 295 mm
Net weight with stand	16.6 kg
Net weight w/o stand	12.0 kg
Net weight packaged	21.3 kg (without optional accessories)
Tilt	-5° to +25°
Swivel	-30° to +30°

Product specifications**NIO FUSION 12MP (MDNC-12130)**

Pivot	N/A
Height adjustment range	100 mm
Mounting standard	VESA (100 mm)
Screen protection	N/A
Recommended modalities	All digital images, including digital mammography and breast tomosynthesis
Certifications	CE0123 (Medical Device) FDA 510(K) K203106 CCC (China) KC (Korea) BIS (India) EAC (Russia, Kazakhstan, Belarus, Armenia and Kyrgyzstan) Safety specific: IEC 60950-1:2005+A1:2009+A2:2013 EN 60950-1:2006+A1:2010+A11:2009+A12:2011+A2:2013 IEC 62368-1:2018 EN IEC 62368-1:2020+A11:2020 IEC 60601-1:2005+A1:2012+A2:2020 EN 60601-1:2006+A1:2013+A12:2014+A2:2021 AAMI ES 60601-1:2005+A1:2012+A2:2021 CAN/CSA C22.2 No. 60601-1:2014 (Reaffirmed 2022) EMI specific: IEC 60601-1-2:2014+A1:2020 (Ed.4.1) EN 60601-1-2:2015+A1:2021 (Ed.4.1) FCC part 15 Class B ICES-001 Level B VCCI (Japan) Environmental: EU RoHS, China RoHS, Korea e-Standby, REACH, Canada Health, WEEE, Packaging Directive
Supplied accessories	User guide Documentation disc System sheet Video cables USB cables Mains cables
Optional accessories	Display controller
QA software	QAWeb
Warranty	5 years, including 40000 hrs backlight warranty
Operating temperature	0 °C to 35 °C (20 °C to 30 °C within specs)
Storage temperature	-20 °C to 60 °C
Operating humidity	10% to 70% (non-condensing)
Storage humidity	10% to 70% (non-condensing), max. 70% at max. 40 °C
Operating pressure	62 kPa minimum
Storage pressure	50 to 106 kPa

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