

# 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 clinical tools improve reading ergonomics and support efficient workflow for static and dynamic imaging.

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

## **Enjoy consistent and compliant colors and greyscales**

With a 12 MegaPixel 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**

#### **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 grayscale 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 medical standards
- 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

\*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**

|                                       |  |
|---------------------------------------|--|
| 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)<br>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 Technology                 | ULT  |
| SteadyColor Calibration               | 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 <sup>2</sup>   |
| DICOM calibrated luminance            | 600 cd/m <sup>2</sup>  |
| 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   |
| USB ports                             | 2x USB-B 2.0 upstream (switchable endpoint)<br>2x USB-A 2.0 downstream             |
| Power rating                          | 100-240 Vac, 50/60 Hz, 3.6-1.6 A   |
| Power consumption                     | 105 W (nominal)<br>< 0.5 W (hibernate)<br>< 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°   |
| 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         |

## PRODUCT SPECIFICATIONS

## NIO FUSION 12MP MDNC-12130

|                              |   |
|------------------------------|---|
| <b>Certifications</b>        | <p>FDA 510(K) K203106<br/>CE1639 (Medical Device Class IIb)<br/>CCC (China)<br/>KC (Korea)<br/>BIS (India) Pending<br/>EAC (Russia, Kazakhstan, Belarus, Armenia and Kyrgyzstan) Pending<br/>INMETRO (Brazil) Pending</p> <p>Safety specific:<br/>IEC 60950-1:2005 + A1:2009<br/>EN 60950-1:2006 + A1:2010 + A11:2009 + A12:2011 + A2:2013<br/>IEC 60601-1:2005 + A1:2012<br/>EN 60601-1:2006 + A1:2013 + A12:2014<br/>ANSI/AAMI ES 60601-1:2005 + R1:2012<br/>CAN/CSA C22.2 No. 60601-1:2014<br/>PSE</p> <p>EMI specific:<br/>IEC 60601-1-2:2014 (ed4)<br/>EN 60601-1-2:2015 (ed4)<br/>FCC part 15 Class B<br/>ICES-001 Level B<br/>VCCI</p> <p>Environmental:<br/>EU RoHS<br/>China RoHS, China Energy Label<br/>Korea e-Standby<br/>REACH<br/>Canada Health<br/>WEEE<br/>Packaging Directive</p> |
| <b>Supplied accessories</b>  | <p>User guide<br/>Documentation disc<br/>System sheet<br/>Video cables<br/>USB cables<br/>Mains cables</p>  |
| <b>Optional accessories</b>  | <p>Display controller</p>   |
| <b>QA software</b>           | <p>QAWeb</p>  |
| <b>Warranty</b>              | <p>5 years, including 40000 hrs backlight warranty</p>  |
| <b>Operating temperature</b> | <p>0 °C to 35 °C (20 °C to 30 °C within specs)</p>  |
| <b>Storage temperature</b>   | <p>-20 °C to 60 °C</p>  |
| <b>Operating humidity</b>    | <p>10% to 70% (non-condensing)</p>  |
| <b>Storage humidity</b>      | <p>10% to 70% (non-condensing), max. 70% at max. 40 °C</p>  |
| <b>Operating pressure</b>    | <p>62 kPa minimum</p>   |
| <b>Storage pressure</b>      | <p>50 to 106 kPa</p>  |

Last updated: 14 Jan 2021

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