

Specifications Nio Fusion 4MP display

Display	MDNC 4130
Display technology	TFT AM LCD Dual Domain IPS Technology
Active screen diagonal	30 inch (756.23 mm)
Active screen width	25.25 inch (641.3 mm)
Active screen height	15.78 inch (400.8 mm)
Pixel pitch	0.00986 inch (0.2505 mm)
Resolution	2560 x 1600
Dicom calibrated luminance (native white)	150 cd/m ² (43,78 ftl)
Maximum luminance (typical)	300 cd/m ² (87.56 ftl)
Contrast ratio (dark reading room, typical)	400:1
Viewing angle (Horizontal/Vertical)	176°
Display LUT	30 bit color
Video input	2 x DVI
Image stabilization	Backlight Sensor BLOS
DuoView mode	Drives LCD in 2 x (1280 x 1600) or 2 x (1200 x 1600) resolution
Display dimensions landscape (W x H x D) (Pedestal in max. position)	27.44 x 25.59 x 11.22 inch (697 x 650 x 285 mm)
Display weight	25 kg (55.1 lb)
Approvals	EN60601-1-2, FCC-B, CE,CCC, ICES-001, KETI, PSE
Operational temperature range	0° C to + 40° C (32° to 104°F)
Within spec temperature range	+15°C to +35° C (59° to 95°F)
Power consumption (Typical)	150 W

Specifications Nio Fusion 4MP display controller

Display controller	MXRT 5100
System requirements	
Bus compatibility	PCI Express x16 native support
Power consumption	Computer power supply of 300W or higher recommended. Auxiliary power connection.
Form factor	ATX
Operating system	Windows 2000, XP, X64
Platforms	Intel and AMD architectures
Characteristics	
Graphics accelerator	ATI FireGL
Display memory	256 MB
Look-Up Table	32 bits in / 32 bits out
Pixel depth	Up to 64 bit color
Electrical standard	Dual Link DVI complying to v1.0 specification
Direct 3D HW support	Microsoft DirectX V9.0, Vertex Shader v3.0, Pixel Shader v3.0
OpenGL HW support	OpenGL 2.0
Video output	
Connectors	Two DVI-I connectors
Supported resolutions	Up to 2560 x 2048 / VGA at Boot up
Approvals and compliance	FCC, CE, BSMI, C-Tick, UL
Temperature (operational)	0° to 55° C (32° to 131° F)

FireGL is a registered trademark of ATI Technologies Inc.

Barco medical imaging systems

Barco has established a solid reputation in the medical imaging market by providing high-performance visualization technology for X-ray, digital radiography, digital mammography, ultrasound, magnetic resonance, computed tomography, PACS and 3D imaging applications. Its full line of color and grayscale displays, display controllers, radiology display systems, medical grade projectors, QA tools and Voxar® medical imaging software facilitates confident diagnoses and overcomes the traditional constraints of conventional 2D and 3D workstations.

Barco's expertise is supported by a worldwide network of research, development and support services. A global sales organization and regional support people, who understand your language and requirements, complement Barco's partnership approach.



In search of continuous improvement

M-P-NIOF-1105
Technical specifications are subject to change without prior notice

www.barcomedical.com

Barco
Pres. Kennedypark 35
B-8500 Kortrijk
Belgium
Phone: +32 56 233 244
Fax: +32 56 233 374
E-mail: sales.medical.eu@barco.com

BarcoView, LLC (USA)
3059 Premiere Parkway
Duluth Georgia, 30097-4905, USA
Phone: +1 678 475 8000
Fax: +1 678 475 8100
E-mail: sales.medical.us@barco.com

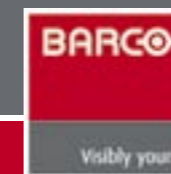
Barco LTD. (Taiwan)
17th floor, Kuohwa Building
868-6, Chungcheng Road
Chungho City, Taipei County, 235, Taiwan
Phone: +886 2 8221 6868
Fax: +886 2 8221 6969

Barco Ltd. (South Korea)
3F, Dansan-Nonhyun Building, 216-8
Nonhyun-dong
Kangnam-ku, Seoul 135-010,
South Korea
Phone +82 2 3445 8900
Fax +82 2 3445 8737

Barco nv, Rep. Office Shanghai (China)
7F, Fen Yang Road 138
Shanghai PRC 200120, China
Phone +86 21 5465 5501
Fax +86 21 5465 5502

Barco Pte. Ltd.
Block 750E, Chai Chee Road
#05-03 Technopark@Chai Chee
Singapore 469005
Singapore
Tel. +65-6243.7610
Fax +65-6443.9874 or +65-6441.7926

Barco Systems Pty. Ltd. (Australia)
2 Rocklea Drive,
Port Melbourne, Vic 3207 Australia
Phone +61 3 9646 5833
Fax +61 3 9646 5887



Nio Fusion 4MP



Large-screen medical color display system



Truly seamless side-by-side viewing

Nio® Fusion 4MP is an innovative large-screen medical color display system specifically designed to bring enhanced flexibility to the medical imaging workflow. The system's 30-inch screen surface gives you the space you need to review medical images in full size without compromising on quality.

No more distracting bezels. No more color-matching issues. Nio® Fusion 4MP seamlessly fuses two portrait 2MP displays into one integrated desktop, opening a new array of possibilities. Now you can display more CT slices on a single screen or look at more color and grayscale images at the same time. What's more, you no longer need to choose between a portrait or a landscape setup, as the large screen area allows you a high degree of desktop flexibility.

Welcome to the world of seamless side-by-side viewing.



Nio® Fusion 4MP benefits:

- 30-inch large screen viewing in 2560 x 1600 resolution
- Truly seamless side-by-side mode without distracting bezels
- Ultimate desktop flexibility
- Fast and smooth image processing
- No color matching complexity
- DICOM out-of-the-box
- Protective front cover

Application areas

PACS throughout the hospital

Nio® Fusion 4MP is the ideal display solution for consulting HIS, RIS, color and grayscale PACS images throughout the hospital with the convenience of a large, high-resolution desktop.



Operating room

The space saving form factor of Nio® Fusion 4MP makes it the ideal display for PACS imaging in the OR. Nio® Fusion 4MP is easy to install on a wall or mobile cart. What's more, Nio® Fusion 4MP is the most versatile OR viewing station for the display of a wide variety of patient data coming from a number of modalities that are on the hospital's PACS network.



Multiple viewing setups

Featuring multiple viewing setups, Nio® Fusion 4MP brings a new degree of flexibility to your imaging workstation. Easily integrated into your PACS, Nio® Fusion 4MP allows you to choose between two viewing modes:

- **Single View mode:**
In this mode you can drive the display as a single 4 MegaPixel (2560x1600) desktop.



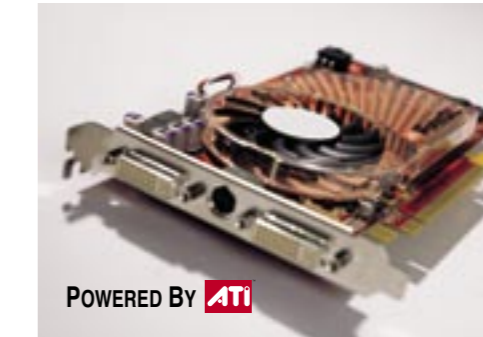
- **Seamless DuoView mode:**
Driving the display via two DVI inputs, the DuoView mode offers a seamless, color-matched dual-head configuration with a resolution of 2 x 2 MegaPixel (2x1200x1600). Fully compatible with legacy PACS systems, bezel-free viewing can now be enjoyed without any additional changes to your PACS configuration.



High-speed image rendering in 2D and 3D

Nio® Fusion 4MP is powered by a high-performance ATI FireGL graphics processing unit. The powerful GPU, based on PCI Express architecture, is your guarantee for ultra-fast and smooth image loading, roaming and manipulation in 2D and 3D.

Following a unique technology cooperation agreement with ATI, a world leader in the design and manufacture of innovative 3D graphics solutions, Barco has the license to optimize ATI's accelerators for medical imaging applications. With medical software applications increasingly relying on OpenGL 2.0 or Microsoft DirectX 9.0, Barco also provides specific support for 3D enabled medical software applications. This results in dedicated driver solutions that make medical applications run faster and more efficiently.



Long-term image confidence

To ensure long-term image confidence, Nio® Fusion 4MP features Backlight Output Stabilization (BLOS). Barco's BLOS technology guarantees fast power-up and continuously stabilizes the luminance output of the system's backlight. This significantly improves the overall consistency of the display system.

DICOM-compliant out of the box

Nio® Fusion 4MP is DICOM-compliant out of the box, which makes it a true Plug and Play solution. For local fine-tuning, the system offers MedICAL QAWeb, a user-friendly softcopy QA tool, allowing users to optimize their display system in accordance with DICOM part 14 in a few easy steps. Because of this, Nio® Fusion 4MP delivers accurate image representations you can trust at all times. Nio® Fusion 4MP can also be calibrated in combination with an optional external sensor.



Protective front cover

To protect its valuable LCD technology against damage from intensive use in clinical environments, Nio® Fusion 4MP comes with a protective front cover. Its non-reflective coating will improve the diagnostic experience, while keeping reflections very low.