NEC MD Series Digital Colour Display Systems

Display Systems for Primary Diagnostics of Medical Images

The NEC MD210C2 flat panel display systems are suitable for viewing of colour and grayscale digital images for diagnosis by trained physicians. Applications include diagnostics image reporting in radiography as well as CT, MRI and other medical imaging techniques. To guarantee the display performance as specified, a MD210C2 display must only be used in conjunction with NEC approved display controller boards.

Key Features:

- 21.3” (2.0 MP image resolution: 1200 x 1600 pixels in portrait orientation)
- Integrated Front Sensor and LED Backlight System for long-lasting white point and brightness stability
- Individual factory calibrated DICOM curve with unique in-built “Quick Screen QA“ check
- Precise DICOM GSDF calibration using internal 14-bit look-up table
- GammaCompMD QA with QAXRAY for latest Quality Assurance control
TECHNICAL SPECIFICATIONS

Panel technology
UA-SFT LCD with LED Backlight

Screen diagonal [cm/Inch]
21.3 / 54.0

Active screen area [cm]
43.3 x 32.5

Native resolution [Megapixel]
2

Landscape mode / Portrait mode [Pixel]
1600 x 1200 / 1200 x 1600 at 60 Hz

Pixel pitch [mm]
0.270 x 0.270

Contrast ratio [typ.]
1400:1

Viewing angle (H / V @ CR > 10:1)
176° / 176°

Luminance (maximum Native)
760 cd/m²

Luminance (calibrated)
400 cd/m², recommended

Response time (typ.) [ms]
40 (tr + tf)

Colour reproduction [Bit-Depth]
10-bit (1024 grey tones per R G B input) with 1.073 billion total colours

Programmable gamma correction
14-bit (16,384 grey tones)

Factory calibration
Gamma correction according to DICOM GSDF at 400 cd/m²

Signal inputs
Digital: 1x DVI-D and 1x DisplayPort

Horizontal frequency [kHz]
31.5 - 95.4

Vertical frequency [Hz]
50.0 - 85.0

Power consumption (Maximum) [W]
80W

Power consumption (factory default setting) [W]
45W

Power consumption Saving Mode [W]
<2W

Dimensions (W x H x D) [mm]
100-120/220-240: integrated power supply
374 x 491 - 594 x 236 (portrait orientation); 473 x 394 - 544 x 236 (landscape orientation)

Weight (including stand) [kg]
11.7

Stand features
150 mm height adjust range, Tilt, Swivel, Screen rotation

Stability and ergonomics
+5 to +35

Ambient temperature (operating) [°C]
30 to 80 (non-condensing)

Ambient humidity (operating) [%]
100 x 100 (4 points)

Kensington Lock (Theft security)
yes

Other advanced features
Automatic backlight control system with front 3-colour sensor for stable white luminance and white point; Individual factory calibrated DICOM gamma correction curve; Precise DICOM GSDF calibration using internal 14-bit look-up table; Control buttons on cabinet back side, with virtual keypad on screen; Multiple OSD lock-out modes to prevent tampering with calibrated screen

Approved Display Controllers
Choice of Matrox, AMD/ATI and nVIDIA models for best imaging performance and compatibility with GammaCompMD software

Warranty
3 years warranty incl. backlight

Shipping contents
Display, Continental and UK power cord; Signal Cable DVI-D to DVI-D; DisplayPort Cable; Multiple language quick reference guide; DVD-ROM with User Guides, GammaCompMD Client QA Software and approved display controller drivers

Options
Calibration instrument (MDSVSENSOR PRO)

NEC MD SERIES COLOUR DISPLAY SYSTEM CONFIGURATIONS*

Display Model variety
Display controller board variety
Software
2 Megapixel
AMD/ATI, Matrox and nVIDIA
GammaCompMD QA
Single or Dual Display
PCI Express Bus

CE-MDD declaration for model MD210C2 is in accordance with the European Directive 93/42/EEC (Medical Device Directive). NEC MD Series Display Systems are registered as medical devices at DMDI and succeeded pre-qualification for the German X-ray ordinance acceptance tests according to DIN W6868-57.

Medical device registration plays an important role in complying with mandatory EU regulations on the medical vigilance system. In addition, product registration ensures you receive the best after-sales support and warranty conditions.

Please register your NEC medical device at http://medical.nec-display-solutions.com/medregistration

For further information please contact us at: med-info@nec-displays.com
www.medical.nec-displays.com

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