

## **NEC MD211C3**



### **NEC MD Series Digital Colour Display Systems**

### **Display Systems for Primary Diagnostics of Medical Images**

The NEC MD211C3 (L211V0) flat panel display systems 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 MD211C3 display must only be used in conjunction with NEC approved display controller boards.

### **Key Features:**

- 21.3" (3.0 MP image resolution: 2048 x 1536 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 Client Software compatible

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# **NEC MD211C3**

#### **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]               | 3  |  |
| Landscape mode / Portrait mode [Pixel]      | 2048 x 1536 / 1536 x 2048 at 60 Hz   |  |
| Pixel pitch [mm]                            | 0.2115 x 0.2115  |  |
| Contrast ratio [typ.]                       | 1400:1   |  |
| Viewing angle (H / V @ CR > 10:1)           | 176°/ 176°   |  |
| Luminance (maximum Native)                  | 800 cd/m <sup>2</sup>  |  |
| 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 On (typical) [W]          | 85W  |  |
| Power consumption Saving Mode (typical) [W] | <2W  |  |
| Power requirements                          | 100 -240V AC tbd A / tbd A; integrated power supply  |  |
| Dimensions (W x H x D) [mm]                 | 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  |  |
| Safety and ergonomics                       | Pending: CE-MDD (EN60601-1, EN60601-1-2); TÜV Approved Medical Device (TÜV GM);  |  |
|   | DIN V6868-57 Category A; FDA510(k), CCC  |  |
| Ambient temperature (operating) [°C]        | +5 to +30  |  |
| Ambient humidity (operating) [%]            | 30 to 80 (non-condensing)  |  |
| VESA mounting interface [mm]                | 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 SYSTEMCONFIGURATIONS\***

| Display Model variety            | 3 Megapixel                |
|----------------------------------|----------------------------|
|                                  | Single or Dual Display     |
| Display controller board variety | AMD/ATI, Matrox and nVIDIA |
|                                  | PCI Express Bus            |
| Software                         | GammaCompMD QA             |

CE-MDD declaration for model MD211C3 is in accordance with the European Directive 93/42/EEC (Medical Device Directive). NEC MD Series Display Systems are registered as medical devices at DIMDI and succeeded pre-qualification for the German X-ray ordinance acceptance tests according to DIN V6868-57.

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 aftersales support and warranty conditions.

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

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

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