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# NEC MD242C2

HEALTHCARE

NEC Display Solutions

**NEC MD Series Digital Colour Display Systems**

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

The NEC MD242C2 (08VN3LWU) 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 MD242C2 display must only be used in conjunction with NEC approved display controller boards.

**Key Features:**

- 24.1“ (2.3MP image resolution; 1920x1200 pixels in horizontal 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

# NEC MD242C2

## TECHNICAL SPECIFICATIONS

| | |
|---|---|
| Panel technology | IPS TFT with LED Backlight |
| Screen diagonal [cm/inch] | 24.1/61.1 |
| Active screen area [cm] | 51.8 x 32.4 |
| Native resolution [Megapixel] | 2.3 |
| Landscape mode / Portrait mode [Pixel] | 1920x 1200 / 1200 x 1920 at 60 Hz |
| Pixel pitch [mm] | 0.270 x 0.270 |
| Contrast ratio [typ.] | 1000:1 |
| Viewing angle (H / V @ CR > 10:1) | 178°/ 178° |
| Luminance (maximum Native) | 350 cd/m$^2$ |
| Luminance (calibrated) | 170 cd/m$^2$, recommended |
| Response time (typ.) [ms] | 14 (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 |
| Factory calibration | Gamma correction according to DICOM GSDF at 170 cd/m2 |
| Signal inputs | Digital: 1x DVI-D, 1x DisplayPort and 1x HDMI; Analogue: 1x D-Sub 15 pin |
| Horizontal frequency [kHz] | 31.5 - 91.2 and 118.4 |
| Vertical frequency [Hz] | 50.0 - 85.0 |
| Power consumption (max.) [W] | 29.5 |
| Power saving mode [W] | <1.5 |
| Power requirements | 100 -240V AC 0.83 A / 0.47 A; integrated power supply |
| Dimensions (W x H x D) [mm] | 557 x 378 - 528 x 228 (landscape), 363 x 573 - 626 x 228 (portrait) |
| Weight (including stand) [kg] | 10.2 |
| Stand features | 150 mm height adjust range, Tilt, Swivel, Screen rotation |
| Safety and ergonomics | CE-MDD (EN60601-1, EN60601-1-2); TÜV Approved Medical Device (TÜV GM); DIN V6868-57 Category B; CCC; Pending: FDA510(k) |
| Ambient temperature (operating) [°C] | +5 to +35 |
| 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; Multiple OSD lock-out modes to prevent tampering with calibrated screen |
| Approved Display Controllers | Choice of Matrox, AMD and Nvidia models for best imaging performance and compatibility with GammaCompMD software |
| Warranty | 3 years standard warranty incl. backlight, optional 5 years |
| 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 | 2 Megapixel |
| | Single or Dual Display |
| Display controller board variety | Matrox, AMD and Nvidia |
| | PCI Express Bus |
| Software | GammaCompMD QA |

CE-MDD declaration for model MD242C2 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 after-sales 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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