NEC Medical Display Solutions

Hospital Wide Display Solutions

The ideal visual interfaces for all hospital departments

NEC stands for product quality and design perfection with a reputation for reliability and an enviable pan-European support infrastructure to back it up. Installing an NEC display means you can trust in our equipment and our company culture. Designed for long term operation, NEC displays and projectors incorporate innovative designs, high quality panels and components and go through demanding quality assurance levels; displays ready for the most demanding mission critical applications, out of the box.

SETTING NEW STANDARDS FOR HEALTHCARE DISPLAY SOLUTIONS

As the leading Manufacturer of innovative medical displays NEC is your partner to deal with the challenges of hospital wide digitalisation processes. NEC Display Solutions is able to offer the widest range of display products for any application. In addition, solutions such as integrated biometric systems ensure only authorised users have access to secure areas, medical devices and patients.

Select from our Medical Displays, Desktop Displays, Large Format Displays or Projectors, in the knowledge that you have one point of support and the highest standards of cross-departmental integration to a common standard. Solutions that your facility needs to excel at what it does best — providing excellent healthcare.

DEPARTMENTS	RADIOLOGY DENTAL RADIOLOGY	OR
RECEPTION	ORTHOPAEDICS	PATHOLOGY
SIGNAGE WAYFINDING	ADMINISTRATION	CONFERENCE EDUCATION

THE WIDEST PORTFOLIO OF DISPLAY SOLUTIONS OF ANY SUPPLIER

Today NEC boasts a comprehensive range of Desktop Displays, Large Format Displays and Projectors, with a model for almost any application from the largest venues or public places to offices and smaller classrooms. NEC is one of the world's largest IT Companies, with the display division operating 14 local sales and support offices across Europe, Middle East and Africa.

NEC offers a wide-range of healthcare solutions that can help establishments improve performance and diagnostic accuracy and streamline care delivery through sophisticated mobile and point-of-care communications systems.

ADMINISTRATION	COMMUNICATION	DIAGNOSTIC	INFORMATION
Back Office	Conference	Radiology	Reception
	Education	Orthopaedics	Wayfinding
		Pathology	Signage
		OR	
		ICU	
		Cardiology	
DESKTOP EA, P, PA Series	LARGE FORMAT P, XUN Series	MEDICAL MD, MDview Series	LARGE FORMAT P, X Series
	PROJECTOR PA Series	LARGE FORMAT P Series	DESKTOP EA, EX Series

MEDICAL

OR

Radiology

Pathology

Orthopaedics

NEC MD SERIES DIAGNOSTIC DISPLAYS

The MD Series of high end diagnostic displays ensure the highest level of image quality due to the very, high luminance uniformity, contrast and full DICOM Part 14 compliance. Backed by years of experience in the research and development of medical LCD displays, NEC offers a high quality range of true 10 bit grayscale diagnostic monitors such as the MD211G3 (3MP) with an exceptional maximum luminance level of 1,450 cd/m2 and the MD211G5(5MP) grayscale display, which guarantees optimal image quality and performance for digital mammography.

A new category of diagnostic displays is created with a wide-screen panel. This can be found in the models MD242C2, MD302C4, MD302C6 and MD322C8. Those models support the Split Screen mode, i.e. you can display two screens on a single monitor. The MD302C6 can therefore replace two 3MP displays, saves space and also decreases eye fatigue by looking at only one display.

The latest series of high luminance colour diagnostic displays MD211C2 (2MP) and MD211C3 (3MP), incorporating Ultra- Advanced Super Fine TFT technology, offer the highest diagnostic image quality for 3D reconstruction applications, as well as for conventional X-ray images without compromise on luminance, DICOM conformance or contrast.

The NEC MD Series can be easily integrated into NEC's GammaCompMD QA standalone or Network Administration software, performing asset management and lifetime Quality Assurance (DICOM conformance and assistance with Quality Assurance routines – AAPM TG-18, DIN V 6868-57 and IEC62563-1).

NEC MD Series are offered including 3 years standard warranty and can be offered with an optional 5 years warranty extension. NEC Display Solutions Healthcare warranty always includes LCD panel and backlight, as well as same service level during the complete warranty period.

MD211G5	MD211C2
MD212G3	MD210C2
MD211G3	MD322C8
MD302C6	MD302C4
MD211C3	MD242C2
MD210C3	

Medical Quality Assurance

NEC GammaCompMD QA

Quality assurance is increasingly demanded for assessing display image quality with a reliable recording and documentation at varying time intervals. Particularly for those larger installations in a modern multi-disciplinary hospital, featuring numerous diagnostic workstations, keeping track of what has been measured and on which display and when, can become a full-time task.

The NEC GammaCompMD QA Quality Assurance Solution with the QAXRAY, module, meets all challenges and demands heads on by providing either an entry-level QA solution for small practices and clinics or a comprehensive solution for an entire hospital establishment, meeting either AAPM TG-18, DIN V 6868-57 / DIN 6868-157 or IEC 62563-1.

NEC MDVIEW SERIES CLINICAL REVIEW DISPLAYS

The MDview Series are DICOM Preset colour displays which have been designed with both reliable quality and affordability in mind. Unique built-in firmware features (which you will not find in off-the-shelf or system-bundled LCDs) make MDview displays, which can be calibrated to the DICOM Grayscale Display Function using NEC's GammaCompMD QA software, ideal for all hospital-wide PACS referral/reviewing.

The use of high quality LCD-panel technology combined with additional dead-pixel screening assure that NEC's MDview Series exceeds the highest reviewing expectations of departments like orthopedics, pneumology or intensive care. The MDview Series can be easily integrated into NEC's GammaCompMD QA standalone or Network Administration software.
NEC MDview Series is offered including 3 years standard warranty and can be offered with an optional 5 years warranty extension. NEC Display Solutions Healthcare warranty always includes LCD panel and backlight, as well as same service level during the complete warranty period..

MDview232

MDview243

MDview272

MD462OR OPERATING THEATRE DEDICATED DISPLAYS

Of particular note is the new MD462OR, a large format operating room display with DICOM calibration, optional integrated single-board computer and full CE-MDD compliance, bringing a much-needed digital display enhancement to the operating room.

NEC LARGE FORMAT REVIEW DISPLAYS

FULL HD AND ULTRA HD DICOM PRESET

NEC offers a wide portfolio of Large Format Displays with DICOM preset. This enables them to display medical images in staff meeting rooms with the required grayscale levels and exceptional image quality. Full HD Resolution (2MP) displays are available in sizes from 40" to 80", 8MP (4K UHD) displays are available in 84". All are ideal for viewing and discussing multiple X-ray images, MR scans, CT scans, etc., side by side. A built-in slot PC or HD-Base-T transmitter is also available.

The NEC Large Format DICOM Displays exceed clinical requirements by displaying high quality real lifesize images of the part of the patient to be treated. The new 8MP (4K UHD) resolution is improving the picture quality, following the trend of increased screen sizes with the same viewing-distance. That means a full lifesize leg or spine can be displayed without compromising on quality on our X841UHD screen in landscape or portrait format, to the DICOM standard. NEC displays are non-reflective ensuring a clear view of the images, close up, from a distance and in high ambient light conditions.

P403	
P463	X651UHD
P553	X841UHD
P703	X981UHD
P801	

MD462OR

Administration and DICOM Simulation

DESKTOP E / EA SERIES

These fully featured monitors with outstanding ecological performance and display quality are the ideal choice for balancing performance with environmental and budget considerations. Whether for accessing medical databases, downloading necessary information for patients, keeping medical files organized and updated or the daily record of financial transactions, NEC Desktop Solutions have the perfect solution for every administrative need

DESKTOP P / PA SERIES

The MultiSync® P and PA Series are DICOM capable, professional performance desktop displays. By selecting the DICOM Preset gamma curve in the display On Screen Display (OSD) menu, these multi-purpose displays are an excellent value upgrade to standard office monitors, offering hospital wide DICOM compliant reviewing.

The MultiSync® PA Series are ideally suited as modality monitor (touch integration optional), for Hospital / Radiology Information System (HIS / RIS) applications or as (third) navigation display on workstations.

EA193Mi	
EA294WMi	

P232W	PA242W
P242W	PA272W
	PA302W
	PA322UHD

PA622U
PA522U
M402H

DICOM SIMULATION PROJECTORS

M / PA SERIES

The NEC M and PA Series installation projectors with DICOM Simulation mode offer medical educators and training professionals the ability to display medical images in meeting rooms or larger conference rooms with the required grayscale levels and with exceptional detail and clarity.

With it's brightness of 6200 ANSI Lumen and 1920 x 1200 High Resolution Image the PA622U offers exceptionally high quality imaging that allows clear analysis of images in a Conference or Training application. NEC PA Series Projectors allow supersized viewing for non-diagnostic purposes.

Displays for Conferencing and Training

NEC MultiSync® LARGE FORMAT DISPLAYS

As a leader in the field, NEC produces a wide range of large format displays that are ideal for conference applications, video-conferencing and group viewing. Our leading X Series and P Series Displays deliver Full HD high quality images backed by 24/7 performance and with a multitude of features that ensure easy integration and upgrade, including an NEC OPS and Interface Extension Slot. Displays with DICOM Simulation are also ideal for use in PACS Demonstration Rooms.

P403	X401S
P463	X462S
P553	X552S
P703	X464UN-2
P801	X554UN

Hospital Information Signage

LARGE FORMAT INFORMATION DISPLAYS

Traditional wayfinding in healthcare has involved static signage, Hospitals are now able to provide wayfinding digitally, allowing more dynamic directional messaging. Digital wayfinding allows for orientation or to highlight exits in an emergency, or simply entertain and inform to alleviate the inconvenience of long waiting times.

P SERIES AND XS SERIES

NEC MultiSync P and XS Series Displays are also ideal for signage applications around a hospital. Displays can be connected via a network for distribution of hospital information or with an OPS Computer installed they can be a stand-alone source of information. Advanced heat management and exceptional image quality means these displays are the ideal visual solution for patient, wayfinding and alert information.

X UN SERIES VIDEOWALL DISPLAYS

Featuring the same standards fo performance and reliability, but specifically tailored for large videowall applications the MultiSync X UN Series can create a high visibility showcase point for any hospital.

NEC offer a wide range of Mounting, Framing, Protective and Expansion solutions for all of our Large Format Displays.

TOUCH ENABLED INFORMATION DISPLAYS

Interactive touch screens are increasingly useful in hospitals enabling a simplified process for the patient, and can be used to reduce care and administration resources. Touch Displays can assist with queue management and direction and allow the patient to customise the information they receive during a visit.
Various NEC Large Format Displays are available with Multi-Touch overlays.

Medical Training Academy

NEC Display Solutions provide professional training sessions for NEC Medical Displays including configuration, administration and DICOM calibration. The NEC Training Academy can be used by an individual, applying to become a certified medical device consultant (in accordance with § 31 of the German and Austrian Medical Devices Act - MPG), as satisfying the Manufacturer's certification requirement.

For further information please visit:
www.medical.nec-display-solutions.com

Specifications

	MD Series Diagnostic Displays						
	MD211G5	MD212G3	MD211G3	MD302C6	MD211C3	MD210C3	MD211C2
Panel technology	IPS Grayscale LED Backlight	IPS TFT Colour with W-LED backlight	SA-SFT Grayscale	IPS TFT Colour with W-LED backlight	UA-SFT Colour LED Backlight	UA-SFT Colour LED Backlight	UA-SFT Colour LED Backlight
Screen diagonal [inch/cm]	21.3 / 54.0	21.3 / 54.0	21.3 / 54.0	30 / 76.2	21.3 / 54.0	21.3 / 54	21.3 / 54.0
Native resolution [Megapixel]	5.0	3.0	3.0	6,7	3.0	3.0	2.0
Resolution	2048 x 2560 Portrait	1536 x 2048 Portrait	1536 x 2048 Portrait	3280 x 2048 Landscape	1536 x 2048 Portrait	1536 × 2048 Portrait	1200 x 1600 Portrait
Contrast ratio (typ.)	1200:1	1400:1	900:1	1000:1	1400:1	1400:1	1400:1
Viewing angle (H / V @ CR > 10:1)	176°/ 176° at 50:1 CR	176° / 176°	176°/ 176°	170° / 170°	176° / 176°	176° / 176°	176° / 176°
Luminance (Max)	1200 cd/m²	1700 cd/m²	1450 cd/m²	800 cd/m²	800 cd/m²	800 cd/m²	900 cd/m²
Grayscale reproduction [Bit-Depth]	10-bit	10-bit	10-bit	10-bit	10-bit	8-bit	8-bit
Programmable gamma correction	13.5-bit	15.5-bit	15.5-bit	16-bit	14-bit	14-bit	14-bit
Factory pre-set	500 cd/m² DICOM GSDF	400 cd/m² DICOM GSDF	400 cd/m² DICOM GSDF	400cd/m² DICOM GSDF	400 cd/m² DICOM GSDF	400 cd/m² DICOM GSDF	400 cd/m² DICOM GSDF
Signal inputs	1x DVI-D, 1x DisplayPort	1x DVI-D, 1x DisplayPort	1x DVI-D, 1x DisplayPort	2x DVI-D, 2x DisplayPort	1x DVI-D, 1x DisplayPort	1x DVI-D, 1x DisplayPort	1x DVI-D, 1x DisplayPort
Power consumption (max.) [W]	80	50	105	114	85	85	80
Dimensions (W x H x D) [mm]	390 x 488 x 228 (Portrait)	380.3 x 474 x 227.6 (Portrait)	361x 483 x 227 (Portrait)	695.6 x 486.5 x 301.6 (Landscape)	393.6 x 473 x 235.5 (Portrait)	393.6 x 473 x 235.5 (Portrait)	393.6 x 473 x 235.5 (Portrait)
Warranty	3 years standard optional 5 years	3 years standard optional 5 years	3 years standard optional 5 years	3 years standard optional 5 years	3 years standard optional 5 years	3 years standard optional 5 years	3 years standard optional 5 years

	MD Series Diagnostic Displays				OR Display	MD View Series Clinical Review Displays		
	MD210C2	MD322C8	MD302C4	MD242C2	MD4620R	MDview232	MDview243	MDview272
Panel technology	UA-SFT Colour LED Backlight	IPS Type TFT Colour with W-LED backlight	AH-IPS Colour LED backlight	IPS Colour LED Backlight	S-PVA Colour	IPS Colour LED Backlight	IPS Colour LED Backlight	AH-IPS Colour LED backlight
Screen diagonal [inch/cm]	21.3 / 54.0	31.5 / 80.1	29.8 / 75.6	24.1 / 61.1	46 / 116.8	23.0 / 50.9	24.1 / 61.1	27.0 / 68.5
Native resolution [Megapixel]	2.0	8.3	4.0	2.3	2.0	2.0	2.3	3.7
Resolution	1200 x 1600 Portrait	3840 x 2160 Landscape	2560 x 1600 Landscape	1920x 1200 Landscape	1920 x 1080	1920 x 1080	1920 x 1200	2560 x 1440
Contrast ratio (typ.)	1400:1	1000:1	1000:1	1000:1	4000:1	1000:1	1000:1	1000:1
Viewing angle (H / V @ CR > 10:1)	176° / 176°	176° / 176°	178° / 178°	178° / 178°	178° / 178°	178° / 178°	178° / 178°	178° / 178°
Luminance (Max)	760 cd/m²	350cd/m²	350 cd/m²	350 cd/m²	700 cd/m²	250 cd/m²	350 cd/m²	340 cd/m²
Grayscale reproduction [Bit-Depth]	8-bit	10-bit	10-bit	10-bit	8-bit	8-bit	8-bit	10-bit
Programmable gamma correction	14-bit	14-bit	14-bit	14-bit	10-bit	14-bit	14-bit	14-bit
Factory pre-set	400 cd/m² DICOM GSDF	200cd/m² DICOM GSDF	180cd/m² DICOM GSDF	180cd/m² DICOM GSDF	550 cd/m² DICOM GSDF	170cd/m² DICOM GSDF	170 cd/m² DICOM GSDF	170 cd/m² DICOM GSDF
Signal inputs	1x DVI-D, 1x DisplayPort	2x DVI-D, 2x DisplayPort, 4x HDMI	1x DVI-D, 1x DisplayPort, 1x Mini-Display-Port, 1x HDMI	1x DVI-D, 1x DisplayPort, 1x HDMI, 1x VGA	1x DVI-D, 1x DisplayPort, 1x HDMI,1x VGA , 1x OPS	1x DVI-D, 1x DisplayPort, 1x HDMI, 1x VGA	1 x DVI-D, 1x DisplayPort, 1x HDMI, 1x VGA	1x DVI-D, 1x DisplayPort, 1x Mini-Display-Port, 1x HDMI
Power consumption (max.) [W]	80	95	87	30	120	29	30	50
Dimensions (W x H x D) [mm]	393.6 x 473 x 235.5 (Portrait)	744.8 x 468.4 x 301.6 (Landscape)	688 x 466 x 302 (Landscape)	557 x 378 x 228 (Landscape)	1153 x 820 x 180 (Landscape)	543 x 337 x 227 (Landscape)	556.8 x 378 x 227.6 (Landscape)	640.4 x 396.2 x 235.5 (Landscape)
Warranty	3 years standard optional 5 years	3 years standard optional 5 years	3 years standard optional 5 years	3 years standard optional 5 years	3 years standard	3 years standard optional 5 years	3 years standard optional 5 years	3 years standard optional 5 years

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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

Empowered by Innovation

NEC