NEC MultiSync® MD Series

High-bright LCD displays ideal for color and grayscale medical imaging applications

Designed exclusively for the demanding needs of radiology, medical imaging, PACS and mammography, the NEC MultiSync MD Series embodies the precision, high performance and intelligence you'd expect from a world leader in display technology. The series includes 2-, 3- and 4-Megapixel (MP) color displays, and 3- and 5-MP grayscale displays.

Benefits you'll realize from these medically certified displays include:

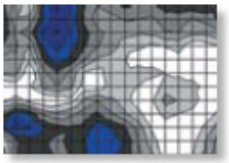
- Outstanding image quality for both color and grayscale images due to NEC's UA-SFT and SA-SFT liquid crystal technologies, which offers high brightness without compromising contrast or viewing
- Color displays that feature brightness and contrast performance rivaling grayscale displays
- Grayscale displays feature long life, high resolution and high brightness
- Fewer screen uniformity errors and automatic compensation for differences in color/grayscale and luminance across the entire screen because of digital uniformity correction on select models
- The MD212MC and MD213MC feature an integrated, tri-stimulus (three-color) sensor that receives more light information than standard (brightness only) sensors and, therefore, is extremely accurate and stable
- Each MD Series monitor comes calibrated out of the box to the DICOM grayscale display function for luminance and every model features an integrated front sensor or a backlight sensor
- More finely detailed, high-definition rendering of color images and crisper display of even the most delicate shadings and color differences due to RGB lookup tables (LUTs) as large as 12-bit
- Every display includes GammaComp™ MD software to ensure consistent image quality by simple local or network interface for conformance to the DICOM standard, while providing an easy-to-use QA environment for medical imaging

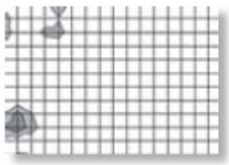
FIVE YEAR LIMITED WARRANTY

Model	Size	Type
MD212MC	21.3″	2MP Color
MD213MC	21.3″	3MP Color
MD213MG	21.3″	3MP Grayscale
MD304MC	30″	4MP Color
MD205MG	20.1″	5MP Grayscale

Without ColorComp

With ColorComp





Achieve complete color and brightness uniformity. *By nature, LCD panels contain uniformity errors, which are visible as slightly brighter or darker areas on the screen. To combat this inherent trait, each MD Series display is individually characterized during production and digital uniformity correction is applied. This technology, called ColorComp, reduces the non-uniformity to virtually unnoticeable levels and applies a digital correction to each pixel on the screen to compensate for differences in color and luminance.*

For consistent image quality the built in front sensor constantly monitors and maintains brightness for optimal DICOM GSDF calibration and for non-assisted conformance, calibration and reporting functions,the sensor is capable of measuring monitor brightness, white-point and contrast response.

NEC MULTISYNC MD SERIES The clear choice in diagnostic displays.

Model	MultiSync MD212MC	MultiSync MD213MC	MultiSync MD213MG	MultiSync MD304MC	MultiSync MD205MG
Display					
Viewable Size Image	21.3"	21.3"	21.3"	29.8"	20.1"
Pixel Pitch	0.27mm	0.21mm	0.21mm	0.251mm	0.156mm
Pixels Per Inch	94	120	120	101	163
Brightness (typical)	400 cd/m² calibrated / 850 cd/m² max	400 cd/m² calibrated / 800 cd/m² max	400 cd/m² calibrated / 1450 cd/m² max	200 cd/m² calibrated / 350 cd/m² max	850 cd/m² max / 400 cd/m² calibrated
Contrast Ratio (typical)	1050:1	750:1	900:1	1000:1	600:1
Viewing Angle (typical)	176° Vert., 176° Hor. (88U/88D/88L/88R) @ CR > 10	176° Vert., 176° Hor. (88U/88D/88L/88R) @ CR > 10	176° Vert., 176° Hor. (88U/88D/88L/88R) @ CR > 10	178° Vert., 178° Hor. (89U/89D/89L/89R) @ CR > 10	170° Vert., 170° Hor. (85U/85D/85L/85R)
Response Time (typical)	Rapid Response™ 20ms Gray-to-Gray	Rapid Response™12ms Gray-to-Gray	Rapid Response™ 12ms Gray-to-Gray	Rapid Response™ 6ms Gray-to-Gray	30ms
Panel Bit Depth	12-bit internal LUTs, displays 16.7 million colors out of 68.5 billion color palette and 256 shades of gray out of 4096	12-bit internal LUTs, displays 16.7 million colors out of 68.5 billion color palette and up to 1024 shades of gray out of 4096	12-bit internal LUTs, displays up to 1024 shades of gray out of 4096	12-bit internal LUTs, displays 16.7 million colors out of 68.5 billion color palette and 256 shades of gray out of 4096	11.5-bit: 1024 shades of gray from a pallet of 3061
Inputs	DVI-D, DVI-I and VGA 15-pin D-sub	DVI-D and DVI-I	DVI-D and DVI-I	DVI-D (HDCP), DVI-I	DVI-D
Image Stabilization	Tri-stimulus front sensor	Tri-stimulus front sensor	Front sensor	Backlight sensor	Backlight sensor
Native Resolution	1600 x 1200 @ 60 Hz landscape / 1200 x 1600 @ 60 Hz portrait	2048 x 1536 @ 60 Hz landscape / 1536 x 2048 @ 60 Hz portrait	2048 x 1536 @ 60 Hz landscape / 1536 x 2048 @ 60 Hz portrait	2560 x 1600 @ 60 Hz landscape / 1600 x 2560 @ 60 Hz portrait	2560 x 2048 Landscape / 2048 x 2560 Portrait
Additional Features	DICOM GSDF calibrated, ColorComp image uniformity correction, ambient light compensation, response time overdrive, GammaComp MD QA software, pivot, tilt, swivel, height-adjustable stand (5.9 in./150mm), analog/digital CableComp™	DICOM GSDF calibrated, ColorComp image uniformity correction, ambient light compensation, response time overdrive, GammaComp MD QA software, pivot, tilt, swivel, height-adjustable stand (5.9 in./150mm), analog/digital CableComp™	DICOM GSDF calibrated, ColorComp image uniformity correction, ambient light compensation, response time overdrive, GammaComp MD QA software, pivot, tilt, swivel, height-adjustable stand (5.9 in./150mm), analog/digital CableComp™	DICOM GSDF calibrated, ColorComp image uniformity correction, ambient light compensation, response time overdrive, GammaComp MD QA software, pivot, tilt, swivel, height-adjustable stand (5.9 in./190mm), analog/digital CableComp™	DICOM GSDF calibrated, mammography approved, GammaComp MD QA software, Dual Link DVI-D, pivot, tilt, swivel, height-adjustable stand (4.7 in. / 120mm)
Voltage Rating	AC 100-120V / AC 220-240V	AC 100-120V / AC 220-240V	AC 100-120V / AC 220-240V	AC 100-120V / AC 220-240V	Internal, AC 100-240V, 50/60 Hz nominal
Power Consumption (typical)					
On	100W	105W	100W	143W	65W
Power Savings Mode	2W	2W	2W	1.3W	< 3W
Dimensions (WxHxD)					
Net (with stand)	18.4 x 17.1-23 x 12 in. / 467.8 x 434.3-584.3 x 306mm	18. x 17.1-23 x 12 in. / 467.8 x 434.3-584.3 x 306mm	18. x 17.1-23 x 12 in. / 467.8 x 434.3-584.3 x 306mm	27.1 x 18.8-26.3 x 13.5 in./ 687.3 x 478.6-668.6 x 342.8mm	18.7 x 18.3 x 9.7 in. / 474.3 x 465.3 x 247.3mm (Landscape)
Net (without stand)	18.4 x 14.2 x 4.4 in. / 467.8 x 361.6 x 110.7mm	18.4 x 14.2 x 4.4 in. / 467.8 x 361.6 x 110.7mm	18.4 x 14.2 x 4.4 in. / 467.8 x 361.6 x 110.7mm	27.1 x 17.6 x 5 in./ 687.3 x 446.8 x 126mm	14.9 x 20.2 x 9.7 in. / 379.6 x 512.7 x 247.3mm (Portrait)
Net Weight					
(with stand)	23.5 lbs. / 10.7 kg	23.5 lbs. / 10.7 kg	23.5 lbs. / 10.7 kg	42 lbs. / 19.2 kg	25.8 lbs. / 9.8 kg
(without stand)	16.5 lbs. / 7.5 kg	16.5 lbs. / 7.5 kg	16.5 lbs. / 7.5 kg	31.7 lbs. / 14.4 kg	NA
VESA Hole Configuration Specifications	100 x 100mm	100 x 100mm	100 x 100mm	100 x 100mm and 200 x 100mm	100 x 100mm
Environmental Conditions					
Operating Temperature	5-35° C / 41-95° F	5-35° C / 41-95° F	5-35° C / 41-95° F	5-35° C / 41-95° F	10-40° C / 50-104° F
Operating Humidity	30-80%	30-80%	30-80%	30-80%	30-80%
Operating Altitude	3000m / 9842 ft.	3000m / 9842 ft.	3000m / 9842 ft.	3048m / 10,000 ft.	3048m / 10,000 ft.
Storage Temperature	-10-60° C / 14-140° F	-10-60° C / 14-140° F	-10-60° C / 14-140° F	-10-60° C / 14-140° F	-10-60° C / 14-140° F
Storage Humidity	10-85%	10-85%	10-85%	10-85%	10-95%
Storage Altitude	12,192m / 40,000 ft.	12,192m / 40,000 ft.	12,192m / 40,000 ft.	12,192m / 40,000 ft.	12,192m / 40,000 ft.
Safety Standards	UL/C-UL, UL60601-1, Gost/PCT, PSB, CCC, FCC Class B/Canadian DOC, C-tick, MPR II / MPR III, VCCI (class 2), JIS C 61000-3-2, static electricity guideline, low emission guideline, TUV-Ergonomie, US Mercury regulations, WEEE, RoHs, SASO, Energy Star 4.0 Tier 2, JEITA VOC Guideline. J-Moss, FDA 510k, CE-MDD Class 1, AAPM-TG18	UL/C-UL, UL60601-1, Gost/PCT, PSB, CCC, FCC Class B/Canadian DOC, C-tick, MPR II / MPR III, VCCI (class 2), JIS C 61000-3-2, static electricity guideline, low emission guideline, US Mercury regulations, WEEE, RoHs, SASO, Energy Star, J-Moss, FDA 510k, CE-MDD, IRAM, TUV GM, EPEAT, AAPM-TG-18, DIN V 6868-587 (Germany) CATB	UL/C-UL, UL60601-1, Gost/PCT, PSB, CCC, FCC Class B/Canadian DOC, C-tick, MPR II / MPR III, VCCI (class 2), JIS C 61000-3-2, static electricity guideline, low emission guideline, ISO9241-307, US Mercury regulations, WEEE, RoHs, SASO, Energy Star, J-Moss, FDA 510k, CE-MDD, IRAM, TUV GM, EPEAT, AAPM-TG-18, DIN V 6868-587 (Germany) CATB	UL/C-UL, UL60601-1, CE, Gost/PCT, PSB, CCC, TUV GS, FCC Class B/Canadian DOC, C-tick, MPR II / MPR III, VCCI (class 2), JIS C 61000-3-2, static electricity guideline, low emission guideline, TUV-Ergonomie, ISO9241-307, US Mercury regulations, WEEE, RoHs, SASO, Energy Star 4.0 Tier 2, GEEA, JEITA VOC Guideline. J-Moss, Windows XP, DEN-TORI, FDA 510k	UL2601/EN60601-1/EC601, FCC part 15 class B, CE/MDD, PCT, C-tick, PCBC/B Mark, PSB, EnergyStar, GEEA Energy Label, DIN 6868-57, FDA 510K for mammography
Limited Warranty*	5 years parts and labor, including Advanced Overnight Exchange	5 years parts and labor, including Advanced Overnight Exchange	5 years parts and labor, including Advanced Overnight Exchange	5 years parts and labor, including Advanced Overnight Exchange	5 years parts and labor, including Advanced Overnight Exchange

* Backlight usage limited to 30,000 hours at 400 cd/m² or less (MD304MC: 20,000 hours at 200 cd/m² or less

ENERGY STAR

RoHS compliant

CERTIFIED FOR Windows Vista™

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