

# Technical specifications Nio Color

Display	Nio 3MP Color HB
Display	MDNC-3121
Display technology	TFT AM LCD IPS
Active screen diagonal	540 mm (21.3")
Active screen width	433 mm (17")
Active screen height	325 mm (12.8")
Pixel pitch	.2115 mm (0.00833")
Resolution	2048 x 1536 / 1536 x 2048
Maximum luminance (typical)	800 cd/m <sup>2</sup>
DICOM calibrated luminance (native white)	400 cd/m <sup>2</sup>
Contrast ratio (dark reading room, typical)	750:1
Viewing angle (Horizontal/Vertical)	176°
Display LUT	10 bit
Video input	DVI
Light output stabilization	Backlight sensor BLOS
Uniformity correction	Yes
Display dimensions portrait (w x h x d)	385 x 585 x 250 mm (15.16 x 23.5 x 9.8")
Display dimensions landscape (w x h x d)	485 x 535 x 250 mm (19.1 x 21.1 x 9.8")
Display weight	13 kg (28.7 lb)
Approvals	CE, UL-60601, CSA C22.2 No 601.1, IEC60601, EN-60601-1-2, FCC level B, FDA510(k)
Operational temperature range	0° to +35°C (+32° to + 95°F)
Power consumption (typical)	72 W

Display controller	Barco MXRT-5200
Bus compatibility	PCIe x16
Power consumption	Computer power supply of 375W or higher
Form factor	98,4 x 228,6 x 15,9 mm (3.87" x 9.0" x 0.63")
Operating system	Windows XP 32/64-bit, Server 2003, 2008, Vista XPDM, WDDM
Platforms	Intel® and AMD architectures
Graphics accelerator	ATI FireGL
Display memory	512 MB GDDR4
Look-Up Table	24 bits in / 24 bits out
Pixel depth	24 bit / 30 bit (HDR mode)
Electrical standard	Dual link DVI complying to v1.0
Direct 3D HW support	Microsoft DirectX v10.0/v9.0, Vertex Shader v4.0/v3.0, Pixel Shader v4.0/v3.0
OpenGL HW support	OpenGL 2.1
Video outputs	Two DVI-I connectors
Supported resolutions	Up to 3280 x 2048 VGA at boot-up
Approvals and compliance	FCC part 15 Class B, CE, UL-60950-1, BMSI CNS, CISPR-22/24, VCCI, CSA C22.2, EU RoHS, MIC
Operational temperature	0° to 55°C (32° to 131°F)

# Technical specifications Nio grayscale

Display	Nio 2MP	Nio 3MP	Nio 5MP
Display	MDNG-2121	E-3620 MA	MDNG-5121 MA
Display technology	TFT AM LCD Dual Domain IPS	TFT AM LCD Dual Domain IPS	TFT AM LCD Dual Domain IPS
Active screen diagonal	540 mm (21.3")	528 mm (20.8")	540.9 mm (21.3")
Active screen width	432 mm (17")	423,9 mm (16.7")	422,4 mm (16.6")
Active screen height	324 mm (12.8")	318 mm (12.5")	337,9 mm (13.3")
Pixel pitch	.270 mm (0.01063")	.207 mm (0.00815")	.165 mm (0.0065")
Resolution	1600 x 1200 / 1200 x 1600	2048 x 1536 / 1536 x 2048	2560 x 2048 / 2048 x 2560
Maximum luminance (typical)	1200 cd/m <sup>2</sup>	1000 cd/m <sup>2</sup>	700 cd/m <sup>2</sup>
DICOM calibrated luminance (native white)	500 cd/m <sup>2</sup>	500 cd/m <sup>2</sup>	500 cd/m <sup>2</sup>
Contrast ratio (dark reading room, typical)	850:1	900:1	800:1
Viewing angle (Horizontal/Vertical, typ.)	170° (10:1 contrast)	170° (10:1 contrast)	170° (10:1 contrast)
Display LUT	10 bit grayscale	10 bit grayscale	10 bit grayscale
Video input	DVI	DVI	DVI
Light output stabilization	Backlight sensor BLOS	Backlight sensor BLOS	Backlight sensor BLOS
Uniformity correction	Yes	Yes	No
Display dimensions portrait (w x h x d)	385 x 585 x 250 mm (15.16 x 23.03 x 9.8")	385 x 585 x 250 mm (15.16 x 23.03 x 9.8")	408 x 591 x 250 mm (16.06 x 23.27 x 9.8")
Display dimensions landscape (w x h x d)	485 x 535 x 250 mm (19.1 x 21.1 x 9.8")	485 x 535 x 250 mm (19.1 x 21.1 x 9.8")	492 x 549 x 250 mm (19.37 x 21.61 x 9.8")
Display weight	12,2 kg (26.9 lb)	13 kg (28.7 lb)	12,5 kg (27.6 lb)
Approvals	CE, UL60601, CSA C22.2 No 601.1, IEC60601, EN 60601-1-2, FDA 510K, FCC level B	CE, UL60601, CSA C22.2 No 601.1, IEC60601, EN 60601-1-2, FDA 510K, FCC level B	CE, UL60601, CSA C22.2 No 601.1, IEC60601, EN 60601-1-2, FDA 510K, FCC level B
Operational temperature range	0° to +35°C (+32° to +95°F)	0° to +40°C (+32° to +104°F)	0° to +40°C (+32° to +104°F)
Temperature within specs	0° to +35°C (+32° to +95°F)	+15° to +35°C (+59° to +95°F)	+15° to +35°C (+59° to +95°F)
Power consumption (typical)	65 W	79 W	80 W

Nio display controllers	BarcoMed Nio	BarcoMed Nio PCIe
Bus compatibility	PCI 2.2 universal signaling	PCI Express® x8, x16
Power consumption	< 15 W	< 15 W
Form factor	106 x 176 x 16 mm (4.2" x 6.9" x 0.6")	106 x 176 x 16 mm (4.2" x 6.9" x 0.6")
Operating system	Microsoft Windows® 2000, XP, X64, Vista XPDM	Microsoft Windows® 2000, XP, X64, Vista XPDM
Platforms	Intel® architectures	Intel® architectures
Graphics accelerator	Barco Aura	Barco Aura
Display memory	128 MB	128 MB
Look-Up Table	10 bits in / 10 bits out	10 bits in / 10 bits out
Pixel depth	10 bit	10 bit
Electrical standard	Single link DVI complying to v1.0 specification	Single link DVI complying to v1.0 specification
Direct 3D HW support	n/a	n/a
OpenGL HW support	n/a	n/a
Video outputs	Two DVI-I connectors	Two DVI-I connectors
Supported resolutions	Up to 2048 x 2560 VGA at boot-up	Up to 2048 x 2560 VGA at boot-up
Approvals and compliance	FCC-B, CE, EN55022 A, EN 50082-1	FCC-B, CE, EN55022 B, EN 61000-6, IEC 60601-102
Operational temperature	10° to 60°C (50° to 140°F)	10° to 60°C (50° to 140°F)