

Technical specifications Nio Color

Display	Nio Color 3MP HB	Nio Color 2MP HB
Display	MDNC-3121	MDNC-2121
Display technology	TFT AM LCD IPS	TFT AM LCD IPS
Active screen diagonal	540 mm (21.3")	540 mm (21.3")
Active screen width	433 mm (17")	432 mm (17")
Active screen height	325 mm (12.8")	324 mm (12.8")
Pixel pitch	.2115 mm (0.00833")	.27 mm (0.01063")
Resolution	2,048 x 1,536 / 1,536 x 2,048	1,600 x 1,200 / 1,200 x 1,600
Maximum luminance (typical)	800 cd/m ²	750 cd/m ²
DICOM calibrated luminance (native white)	400 cd/m ²	400 cd/m ²
Contrast ratio (dark reading room, typical)	750:1	1,050:1
Viewing angle (Horizontal/Vertical)	176°	176°
Display LUT	10 bit	10 bit
Video input	DVI	DVI - DisplayPort
Light output stabilization	Backlight sensor BLOS	Backlight sensor BLOS
Uniformity correction	Yes	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 lbs)	
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)	0° to +40°C (+32° to + 104°F)
Power consumption (typical)	72 W	66 W

Display controller	MXRT-2400	MXRT-5400	MXRT-5450	MXRT-7400
Bus compatibility	PCIe Gen2 x16		PCIe Gen2 x16	PCIe Gen2 x16
Power consumption	43 W		72 W	138 W
Form factor	228,6 x 98,4 mm (9.0" x 3.87")	230.5 x 98.3 mm (9.07" x 3.87") single PCIe slot wide		281.3 x 98.5 mm (11.07" x 3.88") single PCIe slot wide
Operating system	Windows 7 - 32/64-bit			
Platforms	Intel® and AMD architectures			
Graphics accelerator	ATI FirePro			
Display memory	512 MB DDR3		1 GB GDDR5	2 GB GDDR5
Pixel depth	32-bit pixels (supports 8-bit and 10-bit per color channel)			
Electrical standard	Dual Link DVI complying to v1.0 Display Port (DP) complying to v1.1a			
Direct 3D HW support	Microsoft® DirectX v11.0, Vertex Shader 5.0, Pixel Shader 5.0			
OpenGL HW support	OpenGL 4.0			
Video outputs	1x DVI-I, 1x DisplayPort (DP)	1x DVI-I, 2x DisplayPort (DP)	2x DVI-I	1x DVI-I, 2x DisplayPort (DP)
Supported resolutions	Up to 2,096 x 2,800 per head; VGA at boot-up			
Approvals and compliance	FCC Part 15 Class B, CE EN 55022 Limit B, EN 55024, UL-60950-1, BMSI CNS, CISPR- 22/24, IEC609050-1, VCCI, CSA C22.2, EU RoHS directive (2002/95/EC), Certificate of Information & Communication Equipment (Republic of Korea)			
Operational temperature	0° to 60°C (32° to 140° F)			

Technical specifications Nio grayscale

Display	Nio 2MP	Nio 3MP	Nio 5MP	
Display	MDNG-2121	E-3620 MA	MDNG-5121 MA	MDNG-6121
Display technology	TFT AM LCD Dual Domain IPS	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")	540.9 mm (21.3")
Active screen width	432 mm (17")	423,9 mm (16.7")	422,4 mm (16.6")	432 mm (17")
Active screen height	324 mm (12.8")	318 mm (12.5")	337,9 mm (13.3")	324 mm (12.8")
Pixel pitch	.270 mm (0.01063")	.207 mm (0.00815")	.165 mm (0.0065")	.154 mm (0.00606")
Native resolution (landscape/portrait)	1600 x 1200 / 1200 x 1600	2048 x 1536 / 1536 x 2048	2560 x 2048 / 2048 x 2560	2800 x 2100 / 2100 x 2800
Maximum luminance (typical)	1200 cd/m ²	1000 cd/m ²	700 cd/m ²	1100 cd/m ²
DICOM calibrated luminance (native white)	500 cd/m ²	500 cd/m ²	500 cd/m ²	500 cd/m ²
Contrast ratio (dark reading room, typical)	850:1	900:1	800:1	1000:1
Viewing angle (H/V, typical)	170° (10:1 contrast)	170° (10:1 contrast)	170° (10:1 contrast)	170° (10:1 contrast)
Display LUT	10 bit grayscale	10 bit grayscale	10 bit grayscale	10 bit grayscale
Video input	DVI	DVI	DVI	DVI
Light output stabilization	Backlight sensor BLOS	Backlight sensor BLOS	Backlight sensor BLOS	Backlight sensor BLOS
Uniformity correction	Yes	Yes	No	Yes
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")	385 x 585 x 250 mm (15.16 x 23.03 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")	485 x 535 x 250 mm (19.1 x 21.1 x 9.8")
Display weight	12,2 kg (26.9 lb)	13 kg (28.7 lb)	12,5 kg (27.6 lb)	12,3 kg (27.1 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	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)	0° to +35°C (+32° to +95°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)	+15° to +30°C (+59° to +86°F)
Power consumption (typical)	65 W	79 W	80 W	78 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)