Industrial monitors with full flexibility

The NRN line monitors are manufactured by a leading European company with more than 12 years of experience in design and manufacturing of industrial and marine monitors. This ensures meeting the demands of today's professional applications. The most facilities for design and engineering are in-house.

Display- enhancement (optical bonding) and touch screen integration (lamination) are also part of the in-house activities. This brings full flexibility in the features needed for a given application. With business partners for industrial computing most projects with touch displays can be realized, even with integrated PC (Panel-PC).

With the new series of monitors, the NRN-Line, special attention has been taken regarding robustness in a stylish housing. All models within the NRN-line are based on the same concept chassis and can be configured to your needs and all options are available on each model. Below you can find some examples

- Switching between VGA, DVI-D, HDMI and PAL/NTSC inputs
- Metal bezel or Full-glass version
- Projected capacitive (PCAP) or Resistive touchscreen
- High brightness version (1000 cd/m²)
- Transflective enhancement
- Deep dimming backlight with front or external control
- Optical Bonding
- Wide range DC input
- Stainless steel front on the Panelmount units
- Rugged desk stand for VESA mount units available
- Further customized version on request

The OSD standard is setup via rubber buttons at the rear side of the monitor. The extended versions however can have an additional source select button via capacitive sensor integrated in the glass. The versions with a decoder at the front surface, can have full control of source-select, dimming, on/off and OSD through just this one control.

If you have any question or special request, feel free to ask our experts!

IEC60945

As an option, the panel mount (extended) glass models can be supplied with IEC 60945 certification. In this configuration not all options are available.

10.4" Industrial LCD Display
VESA-, panelmount, chassis
NRN104

(Picture: 19" version)
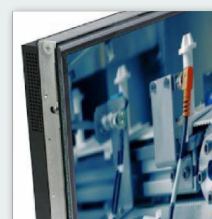

Glass Panel Mount

Metal Panel Mount
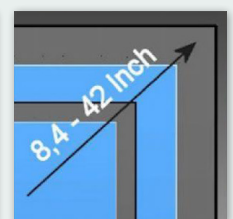

Glass Desktop

Metal Desktop

Rear Mount

Wide Range

Control

Flexible I/O

Specifications: see next pages
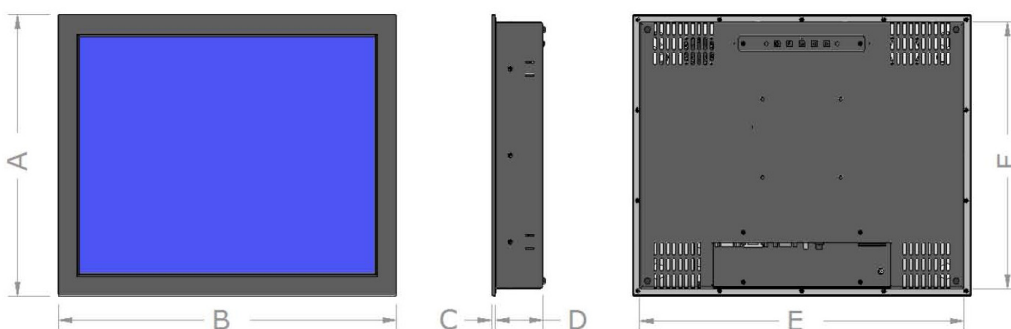
Chassis, VESA- and Panelmount versions
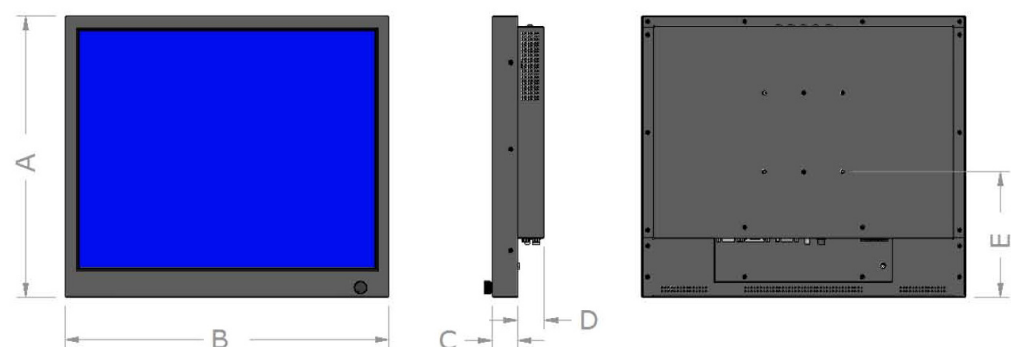

Rear Mount Chassis
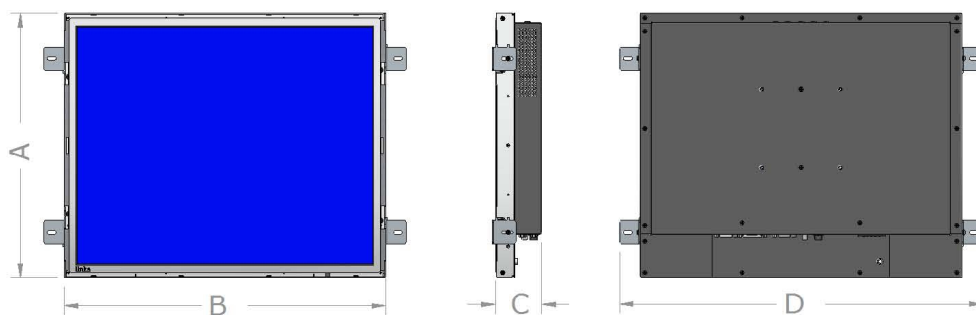
Dimensions	
A	188.8 mm
B	239.8 mm
C	59.0 mm
D	292.8 mm

Panel Mount

Dimensions	
A	211.4 mm on versions P, PG
	227.4 mm on versions PE, PGE
B	262.4 mm
C	5.0 mm on versions P, PE
	5.8 mm on versions PG, PGE
D	61.0 mm
E	244.4 mm
F	193.4 mm on versions P, PG
	209.4 mm on versions PE, PGE

VESA Mount

Dimensions	
A	207.4 mm on versions VE
B	242.4 mm
C	32.0 mm on versions V, VE
D	34.0 mm
E	86.2 mm
VESA	75.0 mm

Specifications: see next page

Specifications

Display	TFT Max. Resolution Video Pixel pitch Active Display Area Aspect Ratio Contrast Ratio Native Brightness Viewing Angles (at CR>10) Backlight life Number of Colours	a-SI TFT Active Matrix 1024 x 768 pixels XGA 0.264 mm 211 x 158 mm 4 : 3 1200 : 1 450 cd/m² 178°H, 178°V 50.000 hours 16.7 Million
Enhancements	High Brightness * Transflective Enhancement * Optical Bonding * AR/AG Glass *	1000 cd/m² typical For sunlight readability To avoid dust and minimize reflections To minimize reflections
Power Supply	90 - 265VAC, 50/60Hz 12VDC 9 - 36VDC *	Separate Power Pack (50W) Standard DC jack Screw Connection
Signal Inputs	Analog Digital PAL/NTSC video	D-sub HD15 (VGA) DVI-D & HDMI Qinch, with optional BNC adapter
Dimming Backlight *	Integrated dimming External Dimming Central Dimming Auto dimming	Potmeter, Encoder Potmeter, Encoder, +/- Buttons External potmeter, Voltage 0-5VDC External light sensor
Touchscreen *	Technology Communication Connection	Projected Capacitive, Resistive USB, RS232 USB B-type, 9p D-sub
Environmental	Operating Temperature Storage Temperature	-20 ~ 70 °C -20 ~ 65 °C
Mechanical	Chassis VESA and Panelmount IP-rating (front only) Weight	Aluminium Steel, Black powder coated RAL9005 IP65 (metal front versions) IP66 (full glass front versions) T.B.D.

* = Optional

Specifications are subject to change without notice.

Part numbers

Rear mount Chassis	NRN104C	
Panelmount with Metal front	NRN104P	
	NRN104PE	Extended front with front controls
Panelmount with Full Glass front	NRN104PG	
	NRN104PGE	Extended front with front controls
VESA mount with Metal front	NRN104V	
	NRN104VE	Extended front with front controls
VESA mount with Full Glass front	NRN104VG	
	NRN104VGE	Extended front with front controls

Monitors
Desktop Monitors
Large screen Monitors
Custom-made Monitors
19" Rack Mount Monitors
Rear Mount Monitors
Monitors for Panel Mount
Monitors for VESA Mount
Kiosks
Accessories

Monitors – Specific applications
Stainless Steel Monitors
Car Displays
Marine Monitors
Military Monitors
Replacement Monitors
Train Monitors

Panel PC's
High Performance Systems
Custom made Panel PC's
Low Power Systems
Extreme environments

Pointing devices
Accessories
Touchpads
Trackballs
Trackball Modules
Joysticks
Custom made Pointing Devices

Keyboards
Desktop Keyboards with or without pointer
Built-in Keyboards with or without pointer
Cables & Connectors
Custom made Keyboards

Mulder-Hardenberg, est. 1927, is the answer to professional demands in the domain of electronic related environments. We don't just sell products. We use our multidiscipline knowledge to provide the best possible solution, designed to your specific interest.

Contactdetails:

The Netherlands
Mulder-Hardenberg B.V.
Westerhoutpark 1a
2012 JL Haarlem
Tel.: +31 23 531 91 84
infonl@m-h.biz

Belgium, France, Luxemburg
Mulder-Hardenberg N.V.
Hoge Weg 129
B-2940 Stabroek
Belgium
Tel.: +32 3 660 13 20
infobe@m-h.biz

Germany
Mulder-Hardenberg GmbH
Nordring 13
D-65719 Hofheim/Ts
Tel.: +49 6192 - 97 91 85
infode@m-h.biz

V0713