

## Nematron M2200W Industrial Display

22.0" Panel Mount Touchscreen Widescreen Display

UL/cUL Class I Div 2 Approved

LED Backlit Display

Analog Resistive Touchscreen

Aluminum Front Bezel

NEMA 4/4X/12, IP66

55°C Operating Temp

Industrial Grade Power Supply

Made in USA



**Nematron**  
by **COMARK**

DS M2200W, Rev A

**NEMA**



Made in USA

### Overview

Offering unparalleled value and superb quality, the Nematron brand M-Series are high performance LED-backlit 12.1", 15", 17", 19", 21.5" and 22" widescreen color TFT flat panel monitors specifically designed for harsh industrial environments including Class I & II, Division 2 Hazardous Locations when mounted in a NEMA enclosure.

M-Series monitors accept standard analog VGA inputs and can display VESA1 video modes up to 1680 x 1050 with 16 million colors. An optional 5-wire analog touch-

screen is available that offers RS-232 or USB interface capability.

M-Series monitors are housed in heavy duty steel chassis with powder coated machined aluminum bezels. The monitors are certified to NEMA 4/4X/12 & IP65 standards, are UL/cUL listed, and meet CE requirements.

All M-Series monitors are shipped with a power input wiring receptacle, VGA cable, touchscreen cables, mounting hardware, manual and driver software.

### Standard Configuration

- 22.0" WSXGA+ Color TFT LED-backlit LCD Display
- 5-wire Analog Resistive Touchscreen with RS-232 or USB interface
  - Optional non-Touch clear polycarbonate window
- Ultra-Thin panel mounting depth, less than 2.9" behind bezel
- NEMA 4/4X/12 front bezel
  - Optional 304 stainless steel front bezel \*
- Integral 100-240 VAC power supply
  - Optional 24 VDC input power

- Simplified mounting clip installation with no studs
- Accepts analog 15-pin video input or DVI input
- UL and cUL Ordinary Locations Listed
- UL and cUL Hazardous Locations Listed
  - Class I Division 2, Groups A, B, C, & D; Class II Division 2, Groups F & G; Class III when mounted in a NEMA enclosure
- FCC & CE Compliant
- 2-Year warranty

\* Check factory for availability of M2200W stainless front panels - not always stocked and may take 6 weeks or more for delivery.

## Technical Specifications



### Physical

|                      |  |
|----------------------|--|
| Overall Dimensions   | 15.00" x 22.00" x 2.95" (381.0mm x 558.8mm x 75.0mm) |
| Panel Mounting Depth | 2.7" (68.6mm)  |
| Cutout Dimensions    | 14.2" x 21.2" (360.68mm x 538.48mm)                  |
| Weight               | 23.0 lbs (10.43kg)                                   |
| Shipping Weight      | 30.0 lbs (13.60kg)                                   |
| Option Weight (SS)*  | +6.0 lbs (2.72kg)*                                   |

\* Additional weight for Stainless Steel option.

### Display

|                          |  |
|--------------------------|--|
| Display Diagonal         | 22.0" (558.8mm)                                |
| Display Size H x V       | 18.65" x 11.65" (473.8mm x 296.1mm)            |
| Native Resolution        | WSXGA+, 1680 X 1050                            |
| Aspect Ratio             | 16:10  |
| Brightness               | 300 nit  |
| Contrast Ratio           | 1000:1   |
| Horz/Vert Viewing Angle  | 178°/178°                                      |
| Backlight Life / Typical | 50,000 hrs                                     |
| Touchscreen              | 5-wire Analog Resistive; No Touchscreen option |

### Peripherals

|               |  |
|---------------|--|
| Available I/O | (1) Analog Video Port, (1) Digital Video (DVI) Port, Touchscreen inputs: (1) RS-232, (1) USB |
|---------------|--|

### Power

|                  |                                      |
|------------------|--------------------------------------|
| Input Power      | 60W                                  |
| AC Input Voltage | 100-240 VAC, 50-60 Hz, 1.0 A Maximum |
| DC Input Voltage | 18-36 VDC, 4.5 A Maximum             |

# Technical Specifications

## Environmental

|                                    | Operating   | Non-operating   |
|------------------------------------|---|---|
| Temperature <sup>3</sup>           | 0°C to 55°C   | -20°C to 70°C   |
| Humidity                           | 20% to 80% RH, noncondensing                                  | 20% to 80% RH, noncondensing                                  |
| Shock <sup>4</sup>                 | 15g peak acceleration, 11msec                                 | 30g peak acceleration, 11msec                                 |
| Vibration (5-2000 Hz) <sup>4</sup> | .006" peak to peak displacement,<br>1.0g maximum acceleration | .015" peak to peak displacement,<br>2.5g maximum acceleration |
| Altitude <sup>5</sup>              | Sea level to 10,000 feet                                      | Sea level to 40,000 feet                                      |

<sup>3</sup> Temperature specifications are for air temp surrounding the unit (i.e. inside any enclosure being utilized). Meets US Federal Requirements specified in 46 CFR 111.01-15 (d) for offshore electrical systems.

<sup>4</sup> Shock & Vibration specifications established with Solid State drives and no rotating media.

<sup>5</sup> Altitude specification is established by using all internal component specifications.

## Compliance

|                    |   |
|--------------------|---|
| NEMA Rating        | NEMA 4/4X/12, IP66  |
| FCC                | 47 CFR, Part 15, Class A  |
| EU CE Marking      | CE, EN 55022: Class A, EN 61000-3-3, EN 61000-6-2, IEC 60950-1  |
| Agency Approvals * | UL508 Listed, ANSI/ISA 12.12.01-2012 <sup>6</sup> , cUL Listed CSA C22.2, #142, cUL Listed CSA 22.2, #213 |

\* Class I Division 2, Groups A, B, C, D; Class II, Division 2, Groups F & G; Class III; Temp. Code: T5, when installed on a flat surface of a Type 1, 4, 4X, or 12 enclosure.

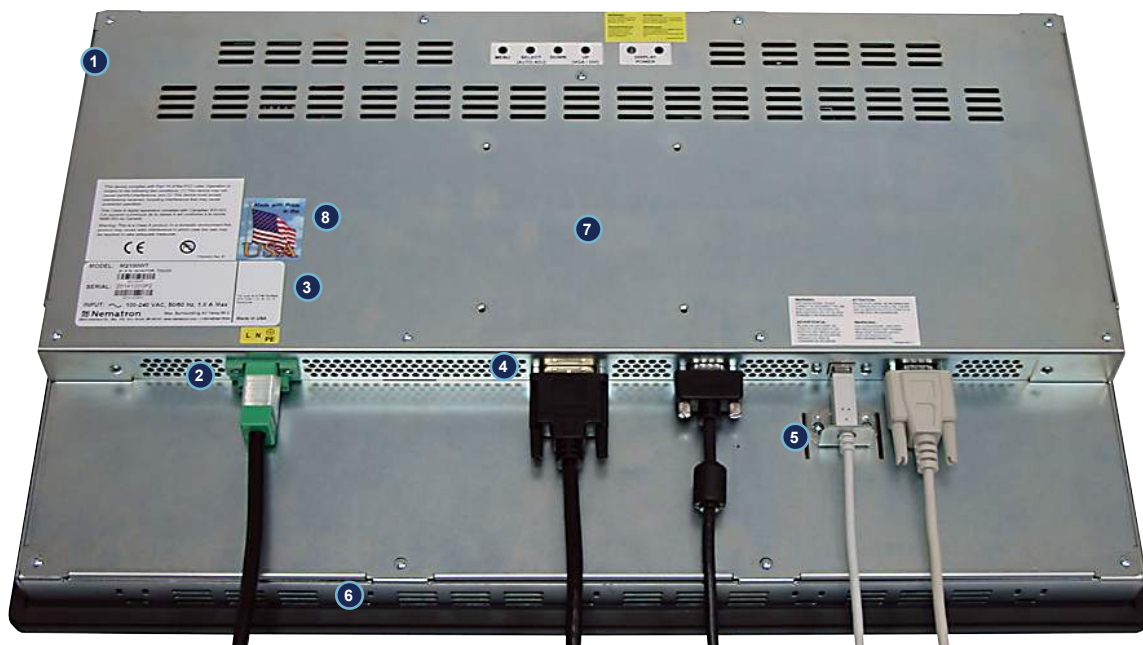
## Front Panel

|                     |   |
|---------------------|---|
| Front Panel Options | Powder-Coated Aluminum Front Panel; with No Logo; Machined 304 Stainless Steel <sup>7</sup> |
|---------------------|---|

<sup>7</sup> Check factory for availability and delivery schedule. M2200W stainless front panels are not always stocked and may take 6 weeks or more for delivery.

## Features

- Optional 5-wire Analog Resistive Touchscreen
- Integral 100-240 VAC or 24 VDC Power Supply
- UL/cUL 508, Class I Div 2, CE Approvals
- I/O Connectivity
- USB Touchscreen Retention Cable
- Panel Mounting via Clips
- VESA Mounting M2200 - 100mm
- Made with Pride in the USA



Standard 2-year warranty  
- Covers parts and service



## Order Number Generation

**Base Unit Configuration: Mxx00(T or WT)**, where x = 12, 15, 17, 19, 21, or 22 (for display size) NEMA 4/4X/12 panel mount, LED-backlit TFT flat panel monitor with 5-wire analog resistive touch screen, built in AC power supply, and powder coated aluminum front panel. Units ship with AC wiring receptacle, 10' VGA cable, 10' RS-232 cable (touchscreen equipped units only), 3m USB cable (touchscreen equipped units only), mounting hardware, and operator's guide (DVI cable sold separately).



### M2200W

**Display Size:**

**2200W** 22.0" WSXGA+ LCD

**Input Options:**

**T** Touchscreen  
**blank** Non-Touch clear polycarbonate window

**Power Supply:**

**blank** 100-240 VAC  
**-DC** Isolated 24 Volt DC

**Front Panel:**

**blank** Powder Coated Aluminum (with Nematron nameplate)  
**-NL** Powder Coated Aluminum without Logo  
**-SS** Machined 304 Stainless Steel <sup>1</sup>

<sup>1</sup> Check factory for availability and delivery schedule. M2200W stainless front panels are not always stocked and may take 6 weeks or more for delivery.

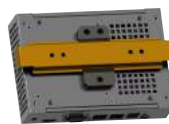
## Accessories

|                 |   |
|-----------------|---|
| CBL-3-VGA       | 15-Pin analog VGA cable, 3' length  |
| CBL-10-VGA      | 15-Pin analog VGA cable, 10' length   |
| CBL-25-VGA      | 15-Pin analog VGA cable, 25' length   |
| CBL-50-VGA      | 15-Pin analog VGA cable, 50' length   |
| CBL-3-RS232     | Serial RS-232 touch screen cable, 3' length   |
| CBL-10-RS232    | Serial RS-232 touch screen cable, 10' length  |
| CBL-25-RS232    | Serial RS-232 touch screen cable, 25' length  |
| CBL-50-RS232    | Serial RS-232 touch screen cable, 50' length  |
| CBL-3-USB       | USB touch screen cable, 3' length   |
| CBL-10-USB      | USB touch screen cable, 10' length  |
| CBL-15-USB      | USB touch screen cable, 15' length  |
| CBL-3M-DVI      | DVI (type D) video cable, 3 m length  |
| CBL-3M-HDMI/DVI | 3 meter HDMI to DVI-D video cable   |
| CBL-25-HDMI/DVI | 25 feet HDMI to DVI-D video cable   |
| CBL-50-HDMI/DVI | 50 feet HDMI to DVI-D video cable   |
| PWR-AC          | Plug for field wiring AC power  |
| PWR-DC          | Plug for field wiring DC power  |
| MISC-CLIP       | Mounting clip kit, includes 16 clips and screws   |
| CBL-PWR-AC      | 6' AC wiring cable with standard 3-prong US end on one side and Phoenix Power Wiring connector with cover on other end.<br>NOTE: NOT allowed for use in Hazardous Conditions. |



#### MTG-DIN-nPC300

DIN Rail Mounting Kit includes DIN Rail bracket that mounts a Nematron nPC300 Node PC to M-Series monitors using the 75mm or 100mm VESA mounting pattern on the rear of the units.



#### MTG-DIN-nPC20

DIN Rail section for mounting a Nematron nPC20 Node PC to M-Series monitors using the 75mm or 100mm VESA mounting pattern on the rear of the units.