

MD-215 Series

15-inch rugged industrial display



- > 15-inch industrial-grade display
- > -40 to 70°C wide-temperature design
- > 1000-nit sunlight-readable LCD
- > Glove-friendly multi-touch (touch model only)
- > Fanless system design
- > Multiple power supplies (AC & DC)
- > Class 1 Division 2, ATEX Zone 2, and IECEx certified for oil and gas applications
- > DNV GL and MR certified for Marine applications



Introduction

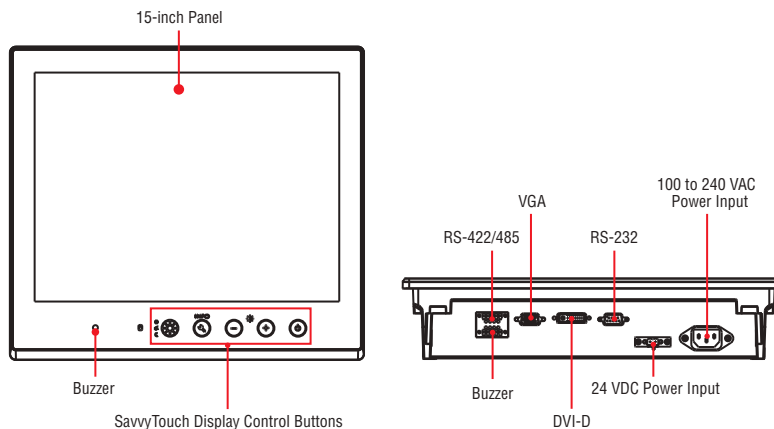
The MD-215 15-inch display has a rugged design for industrial environments. The display uses VGA and DVI-D video signals to support a 1024 x 768 resolution, and comes with RS-232/422/485 ports for connecting serial devices.

The MD-215 series displays are designed with a wide, -40 to 70°C temperature range, making them some of the most reliable industrial platforms available for harsh, hot, indoor/outdoor environments.

The MD-215 series also features a 1000-nit LCD panel offering a sunlight-readable, projected-capacitive, glove-friendly, multi-touch screen, providing an excellent touch panel for outdoor applications.

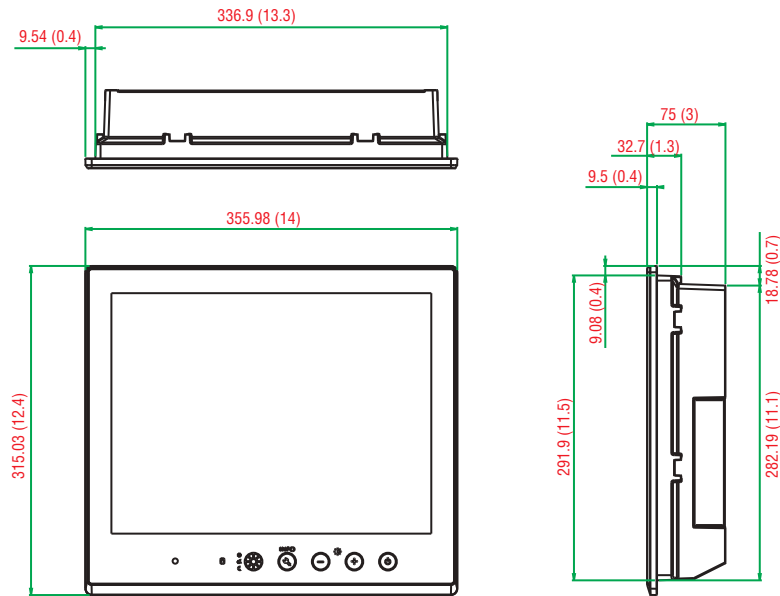
The MD-215 series supports both VESA- and panel-mounting, which can be implemented with accessories that can be purchased separately from Moxa.

Appearance



Dimensions

Unit: mm (inch)



Specifications

Display

Panel Size: 15-inch readable image size

Panel Type: TN

Touch: Capacitive multi-touch with glove-friendly support (touch models only)

Aspect Ratio: 4:3

Pixels: 1024 x 768

Pixel Pitch (RGB): 0.297 (H) x 0.297 (V) mm

Response Time: 20 ms (gray to gray)

Contrast Ratio: 700:1

Light Intensity: 1000 cd/m²

Viewing Angles: 160°/140°

Active Display Area: 304.128 (H) x 228.096 (V) mm

Display Interface: VGA input x 1, DVI-D input x 1

Serial Interface

Serial Standards: 1 RS-232 port (DB9), 1 RS-422/485 port (terminal block)

Optical Isolation Protection: 4 kV

Max. No. of Colors: 16.7M (8 bit color)

Resolution:

- VGA: 640 x 480

- SVGA: 800 x 600

- XGA: 1024 x 768

Serial Signals

RS-232: TxD, RxD, DTR, DSR, RTS, CTS, DCD, GND

RS-422: TxD+, TxD-, RxD+, RxD-, GND

RS-485-2w: Data+, Data-, GND

Front Panel

LEDs: MENU, brightness, INFO, Brightness mode, Day/Dusk/Night

Smart OSD: Yes

Physical Characteristics

Housing: Aluminum sheet metal

Weight: 6.1 kg (13.56 lb)

Dimensions: 356 x 315 x 77.2 mm (14.02 x 12.40 x 3.04 in)

Mounting: Panel (standard), VESA (mounting kit is optional)

System Cooling: Fanless thermal design

Environmental Limits

Operating Temperature: -40 to 70°C (-40 to 158°F)

Storage Temperature: -40 to 70°C (-40 to 158°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

Anti-Vibration: 2 Grms, 5-500 Hz frequency, compliant with IEC 60068-2-6 standard

Anti-Shock: 20 Grms, half sine wave under system operating, 11 ms duration, compliant with IEC 60068-2-27 standard

Power Requirements

Input Voltage:

- DC: 12/24 VDC (Range 9 to 36 VDC)

- AC: 100 to 240 VAC

Power Consumption: 60 W (max.)

Standards and Certifications

Safety: UL 60950-1, IEC 60950-1

Hazardous Environments: UL Class 1 Division 2, ATEX, IECEx

EMC: EN 55032/24

EMI: CISPR 32, FCC Part 15B Class A

EMS:

IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV

IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m

IEC 61000-4-4 EFT: Power: 2 kV; Signal: 1 kV

IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV

IEC 61000-4-6 CS: 3 V

IEC 61000-4-8

IEC 61000-4-11

Ingress Protection Rating: IP66 (front) / IP22 (rear)

Marine: DNV GL

Green Product: RoHS, cRoHS, WEEE

Warranty

Warranty Period: 3 years for system, 1 year for LCD panel

Details: See www.moxa.com/warranty

Ordering Information

Available Models

MD-215X-T: 15-inch display, DVI-D/VGA video input, AC/DC dual power, tape bonding

MD-215Z-T: 15-inch display, DVI-D/VGA video input, AC/DC dual power, multi-touch w/ glove friendly, tape bonding

Optional Accessories (can be purchased separately, for AC power input)

PWC-C13US-3B-183: 10A/125V North American (US) power cord, 183 cm

PWC-C13EU-3B-183: 10A/250V Continental European (EU) power cord, 183 cm

PWC-C13UK-3B-183: 10A/250V United Kingdom (UK) power cord, 183 cm

PWC-C13AU-3B-183: 10A/250V Australian (AU) power cord, 183 cm

PWC-C13CN-3B-183: 10A/250V China (CN) power cord, 183 cm

Optional Mounting/Bracket Kits (can be purchased separately)

MPC-MD-2-15-PMTK: 8 screws for panel mount

MPC-MD-2-15-VESAMTK: VESA-mounting bracket, 100 x 100 mm and 75 x 75 mm

Package Checklist

- MD-215 display
- VGA cable
- DVI-D cable
- 2-pin terminal block x 1
- 5-pin terminal block x 2
- Quick installation guide (printed)
- Warranty card