

# 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

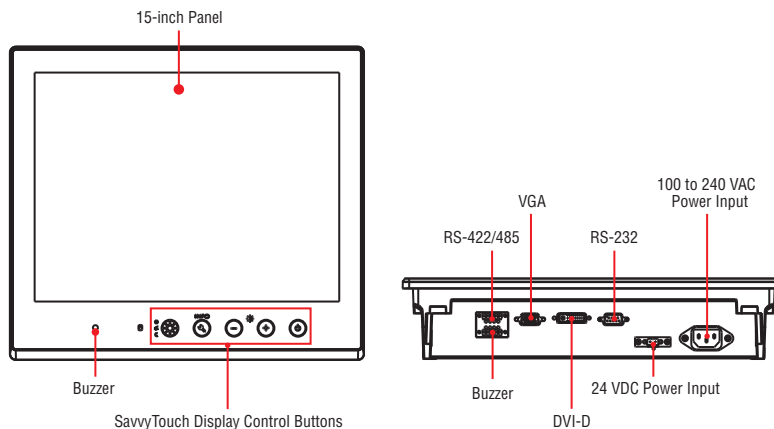
The MD-215 15-inch display has a rugged design for industrial environments. The display uses VGA and DVI-D video signals to support a 1024 x 768 resolution, and comes with RS-232/422/485 ports for connecting serial devices.

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.

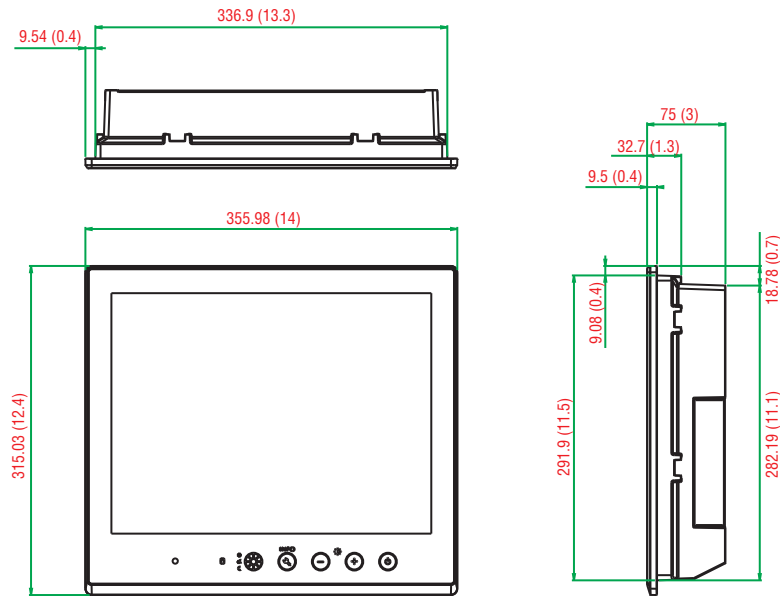
The MD-215 series supports both VESA- and panel-mounting, which can be implemented with accessories that can be purchased separately from Moxa.

### 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/m<sup>2</sup>

**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](http://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