Overview
The MD-215 is a 15-inch industrial display with an aspect ratio of 5:4. It is a reliable and durable display of wide versatility of use in industrial environments.

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 also features a 1,000-nit LCD panel offering a sunlight-readable, projected-capacitive, glove-friendly, multi-touch screen, providing an excellent user experience for outdoor applications.

Package Checklist
Before installing the MD-215 Series, verify that the package contains the following items:

- 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

NOTE: Please notify your sales representative if any of the above items are missing or damaged.
Hardware Installation

Appearance

SavvyTouch Display Control Buttons

The SavvyTouch display controls are located on the front panel of the MD-215. These intelligent controls light up in response to a simple wave of the hand over the area of the screen where they are located. The following table describes the function of each SavvyTouch display control button:

<table>
<thead>
<tr>
<th>Name</th>
<th>Display Color</th>
<th>Control Function/ Color Legend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menu/ Power</td>
<td>Green</td>
<td>Display is powered on and functioning normally. Touch the button to show the OSD settings menu.</td>
</tr>
<tr>
<td></td>
<td>Red</td>
<td>No input signal detected. Display on standby.</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>Power is down and the display is off.</td>
</tr>
<tr>
<td>Brightness</td>
<td>White</td>
<td>Use this button to increase brightness of panel.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use this button to decrease brightness of panel.</td>
</tr>
</tbody>
</table>

VGA   RS-422/485  RS-232  100 to 240 VAC Power Input

Buzzer

DVI-D   24 VDC Power Input

15-inch Panel
## Name | Display Color | Control Function/ Color Legend
---|---|---
INFO | Off | AC/DC power functioning normally.
 | Red | AC/DC power error.
Display mode | White | Switch between DAY/DUSK/NIGHT brightness modes.
 | Off | Panel brightness outside the default range.

### Installing the MD-215

#### Panel Mounting

The MD-215 comes with 8 optional clamp mounts for installation on a panel (where space has been cut out to accommodate the rest of the hardware) or into computing stations where a flush mount is required. **The maximum thickness of the surface to which the display will be clamped is 11 mm.** For a secure mounting, all 8 clamps must be used. The clamp arms are fastened into slots on all four sides of the MD-215. Use the short M4 SUS screws to fasten the clamp arms to the MD-215 mounting slots, as shown in the magnified inset in the diagram. Next, use the clamps to fasten the display to its mounting point. Note the torque value shown in the inset.

#### VESA Mounting

The MD-215 also comes with an optional VESA mounting kit. Four flat screws and four round screws are required to fasten the VESA mounting bracket. See the figure below for detailed screw specifications and torque values.
An additional four screws (not included in the kit) are required to mount the display on a VESA rack. Use M6 screws with a length between 10 and 12 mm for this purpose.

**Connector Description**

**Extending the Display**

The MD-215 is provided with both standard VGA and DVI-D interfaces on the bottom panel. The MD-215 can automatically detect whether the input video source is from the VGA or DVI-D interface.

**Configuring the Display via the Serial Port**

The MD-215 has two serial ports. The RS-232 port uses a DB9 connector, and the RS-422/485 port uses a terminal block connector. Either serial port can be used to modify the display parameters using UART commands. For details on serial port configuration, refer to the MD-215 Hardware User’s Manual. The pin assignments for the ports are shown in the following table:

<table>
<thead>
<tr>
<th>Pin</th>
<th>RS-232</th>
<th>RS-422</th>
<th>RS-485 (2-wire)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DCD</td>
<td>RxDB(+)</td>
<td>TDP(+)</td>
</tr>
<tr>
<td>2</td>
<td>RxD</td>
<td>RxA(-)</td>
<td>TDn(-)</td>
</tr>
<tr>
<td>3</td>
<td>TxD</td>
<td>TxDB(+)</td>
<td>RDp(+)</td>
</tr>
<tr>
<td>4</td>
<td>DTR</td>
<td>TxA(-)</td>
<td>RDn(-)</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>GND</td>
<td>GND</td>
</tr>
<tr>
<td>6</td>
<td>DSR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>RTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>CTS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Powering On/Off the MD-215

To power on the MD-215, connect the MD-215 to an AC power source, a DC power source, or both. Touch the Menu/power button for 1 second to turn on the display.

Touch the Menu/power button for 4 seconds to turn off the display.

**NOTE** If only one power input is connected, the Info button will turn red. This will however not affect the functionality and performance of the MD-215 as long as the power input is stable.

Grounding the MD-215

Proper grounding and wire routing help to limit the effects of noise from electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting the power source.

For detailed configuration of the MD-215, refer to the MD-215 Hardware User’s Manual.