

# DMI-415

15" 16:9 Rolling-Stock Intelligent HMI - x86 based



## VDS Rail

The onboard networking company



The **DMI-415 Rolling-Stock Intelligent HMI - 15" 16:9 aspect ratio** - is designed to provide a robust and versatile solution for Rolling-Stock applications. With support for a wide operating voltage range and a top-level mechanical enclosure, the DMI-415 is ready for harsh environments and compliant with EN 50155.

Options for several interfaces such as **Ethernet, serial line, USB** and the support for **industry standard operating systems** make the DMI-415 capable of empowering many **on-board applications**.

### Highlights

- Display 15" 16:9 ratio
- Display resolution Full HD
- Dual Core / Quad Core processor
- Rolling-Stock Applications
- EN 50155 compliant
- Designed for harsh environmental conditions
- Wide operational temperature up to  $-40^{\circ}\text{C} \div +70^{\circ}\text{C}$
- Wide operational voltage range 24/110 VDC
- Front panel IP65 rated
- Resistive / Capacitive touch screen
- Automatic brightness adjustment
- Ethernet port interfaces
- Serial port interfaces

### Technical specifications

#### DISPLAY PHYSICAL DATA

Type	Color TFT LCD
Size	15.6"
Aspect ratio	16:9
Resolution	1920 x 1080 pixels (FHD)
Colors	262K / 16.2M
Contrast	800:1 (typ)
Brightness	450 cd/m <sup>2</sup> (typ)
Touch Screen	Resistive / Capacitive
Sensors	Brightness sensor
Speakers	Built-in, 1.5 W

#### EMBEDDED PROCESSOR UNIT

CPU	Intel Celeron Dual Core / Quad Core @1.1 GHz or equivalent
L2 Cache memory	2 MB
RAM	4 GB
Flash memory	8 GB Disk on Module
Operating system	Linux or Windows Embedded supported



## Technical Specifications

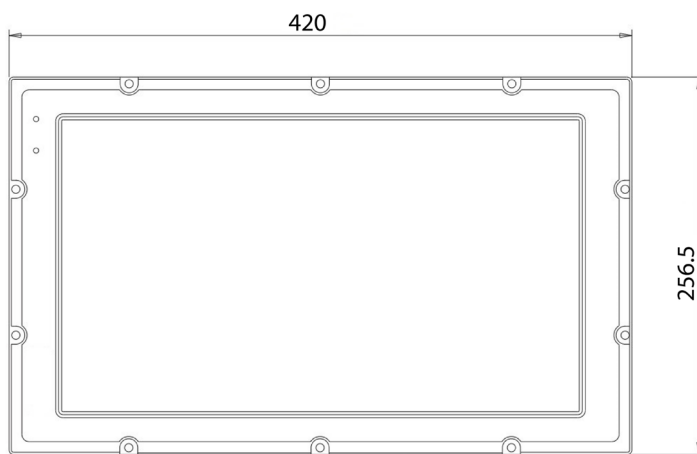
### PHYSICAL DATA

<b>Power supply voltage (insulated)</b>	Nominal 24/72/96/110 Vdc Range according to EN 50155 2W2C - D-Sub connector
<b>Ethernet port</b>	10/100BASE-T(X) M12, female, 4-ways, D-coding connector
<b>Serial port (option)</b>	RS232 / RS422 / RS485 - D-Sub connector
<b>Service port</b>	USB 2.0 - Type-A connector
<b>Interruption voltage supply class</b>	S2, according to EN 50155
<b>Power consumption</b>	40 W max
<b>Overall dimensions (without connectors)</b>	420 x 256.5 x 61 mm
<b>Weight (max.)</b>	5 kg
<b>Operating temperature</b>	-25 °C ÷ +70 °C (+85 °C for 10 min. according to EN 50155 class OT3 with extended operating temperature ST1)
<b>Relative humidity (non-condensing)</b>	0 % ÷ 95 %
<b>Storage temperature</b>	-40 °C ÷ +85 °C
<b>Degree of protection</b>	IP65 on front panel IP40 on back panel

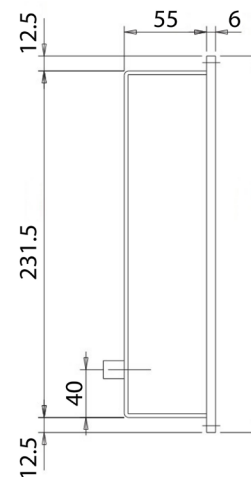
### APPROVALS / COMPLIANCE

<b>EN 50155</b>	Railway Applications (Electronic equipment used on rolling stock)
<b>EN 50121-3-2</b>	Electromagnetic compatibility rolling stock apparatus
<b>IEC 60068-2-1</b>	Environmental testing: Tests - Test Ad: Cold
<b>IEC 60068-2-2</b>	Environmental testing: Tests - Test Bd: Dry heat
<b>EN 60068-2-30</b>	Environmental testing: Tests - Test Db variant 2 - Damp heat
<b>EN 61373</b>	Shock & Vibration - Category 1 class B
<b>EN 50124-1</b>	Insulation coordination
<b>EN 45545-2</b>	Fire & Smoke

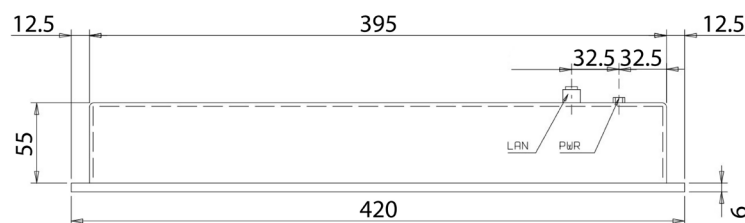
## Train Control Desk Mounting



FRONT VIEW



SIDE VIEW



TOP VIEW

## Ordering codes

**Part Number:** DMIxxxxxx

**Description :** DMI415 16:9 xxxV xxxXxxx xxx



[www.vdsrail.com](http://www.vdsrail.com)



[info:sales@vdsrail.com](mailto:info:sales@vdsrail.com)