

# DMI-310

10" RAILWAY INTELLIGENT HMI



VDS Rail



The DMI-310 Railway Intelligent HMI is designed to provide a robust and versatile solution for rolling stock applications. With support for a wide range of operating voltage and a top-level mechanical enclosure, this Railway Intelligent HMI is ready for harsh environments and is compliant with EN50155. Options for several interfaces such as Ethernet, serial line and the support for industry standard operating systems make the DMI-310 capable of empowering many on-board applications.

## HIGHLIGHTS

- ▶ ROLLING STOCK APPLICATIONS
- ▶ EN50155 COMPLIANT
- ▶ OPERATIONAL TEMPERATURE: -40°C/+85°C ACCORDING TO EN50155-TX CLASS
- ▶ WIDE OPERATING VOLTAGE RANGE
- ▶ MANUAL/AUTOMATIC BRIGHTNESS ADJUSTMENT
- ▶ 8-KEYS USER-PROGRAMMABLE MEMBRANE KEYBOARD
- ▶ STANDARD INTERFACES AVAILABLE (ETHERNET 10/100, USB 2.0,...)
- ▶ RATED IP 65 ON FRONT PANEL
- ▶ LINUX AND WINDOWS XPE SUPPORTED

## Technical Specifications

### APPROVALS/COMPLIANCE

Governing Standard:	EN 50155 Railway Applications (Electronic equipment used on rolling stock)
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### APPROVALS/COMPLIANCE (EMC)

Electromagnetic compatibility rolling stock apparatus:	EN 50121-3-2
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### APPROVALS/COMPLIANCE (ENVIRONMENT)

Environmental test:	EN 60068-2-1
Guidelines for fire protection - Evaluation of fire behavior of materials:	UNI CEI 11170-3
Shock & Vibration:	EN 61373
Temperature range:	-40°C/+70°C (-40°C/+85°C for 10 minutes according to EN 50155-TX class)

### DISPLAY

Colors:	256 K
Contrast:	600:1 (typ)
Dimming:	Max ÷ 4 cd/m
Luminance:	450 cd/m <sup>2</sup> (typ)
Resolution:	640 x 480 (VGA)
Size:	10.4"

### EMBEDDED PROCESSOR UNIT

CPU:	AMD Geode LX800, 500 Mhz
Cache memory size:	128 KB
Flash Memory:	2 GB Disk On Module
Input peripherals:	1 x PS/2 mouse/keyboard port (service)
LAN:	1 x Ethernet 10/100 Base-T port
RAM size:	512 MB
Sensors:	Luminosity sensor
Speaker:	Built-in, 2 Watt
USB:	USB 2.0 port (service)

### KEYBOARD

3-keys brightness control keyboard
8-keys user-programmable membrane keyboard

### OPERATING SYSTEMS

Linux (kernel 2.6.x)
Windows XPE

### POWER SUPPLY

Voltage range:	14,4 ÷ 40 Vcc
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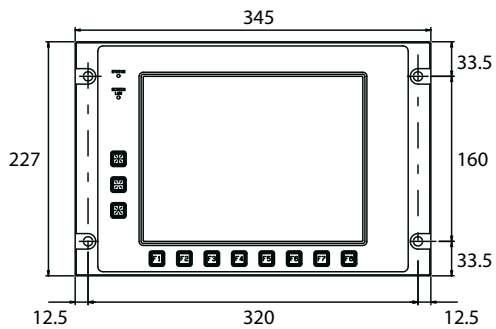
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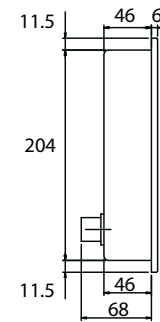


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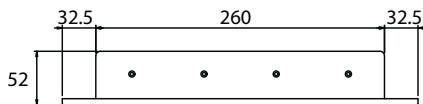
## Wall Mounting



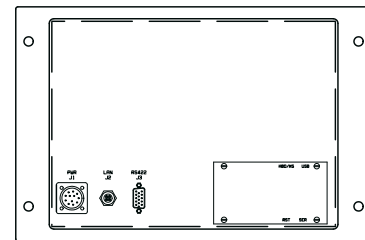
FRONT VIEW



SIDE VIEW



TOP VIEW



PANEL CUT OUT

## Ordering Codes

### DMI-310 24 Vdc version

**DM310M** DMI-310 VGA Railway Intelligent HMI, LX800 500 Mhz, 512MB RAM, 2GB SSD, 24Vdc

### DMI-310 72/96/110 Vdc version

**DM310N** DMI-310 VGA Railway Intelligent HMI, LX800 500 Mhz, 512MB RAM, 2GB SSD, 72/96/110Vdc

### OPTIONS

#### One among the following:

- DM0061** RS-232 port for PC interface
- DM0062** RS-422 port for PC interface
- DM0063** RS-485 port for PC interface
- DM0064** RS-422 port, 2 wires, optoisolated
- DM0065** RS-485 port, 4 wires, optoisolated

#### One among the following:

- DM01FM** 1 GB Disk On Module
- DM04FM** 4 GB Disk On Module

### OPTIONS

#### One among the following:

- DMOS01** Windows XPE operating system (without license)
- DMOS02** Linux operating system

#### Connectors and cables:

- DM0068** M23 power connector + 2 pins