



DPC-XX

Device for visualisation of technologies used in railway vehicles

Key features

- Human Machine Interface technologies device type for rail vehicles visualization
- The device is ready in versions with and without touch-screen and with or without keys
- Display in sizes 15.6", 10.4" or 8.4"
- Display and keys are equipped with LED backlight
- The device is designed for operation in harsh climatic conditions also ranging from -40 °C to 70 °C
- Made from branded components only MITSUBISHI, TRACO, HARTING, INTEL ATOM
- Shape and control are designed according to UIC 612
- Robust and precise workshop processing

Description

The device for the visualization technology of railway vehicles DPC-XX is a type of HMI (Human Machine Interface). The device enables visualization of processes and data obtained from the information, control and CCTV systems. The operator interface DPC-XX is manufactured in accordance with standard UIC 612-01, and it is also complemented by a touch screen based on the principle of the capacitive touchscreen. Display and keys are backlit with LED technology.

Thanks to the robust and precise workmanship has managed to achieve a high MTBF parameters for operations in harsh climatic conditions. The device is equipped with its own heating system with configurable settings for temperatures below -20 °C. Supply voltage, audio signal and communication interface are connected to standard connectors M23, M12 and D-SUB.

4-core INTEL ATOM® is responsible for the high computing performance. DPC-XX has two free mini PCIe expansion slots, and internal SATA interface can be connected to an internal HDD for data recording. DPC-XX is already equipped as standard with a USB interface.

Operating conditions

PARAMETER	VALUE	NOTE
Operating temperature	-40 to +70 °C	class TX pursuant to EN50155
Supply voltage	24-110 V DC ±40 %	range according to EN 50155
Power input	< 40 W	
CPU	Intel Atom E3845 1.91 GHz	
RAM	4 GB DDR3L-1333	according to type
Expandability	2 x mini PCIe slot	according to customer req.
Resistance to overload	1,8 kV, 5/50 µs	complies with EN 50121-3-2
Resistance to temporary phenomena	≥ 3 s	surge impulse at 1.4UN
	4 kV	direct temporary phenomena
Height above sea level	up to 1400 m	class A1 according to EN 50125-1
Mechanical resistance	EN 61373: category 1, class B	
Resolution 15,6" / 10,4" / 8,4"	1366 x 768 points / 1024 x 768 points / 800 x 600 points	
Dimensions 15,6" / 10,4" / 8,4"	440 x 262 x 80 mm / 310 x 214 x 94 mm / 232 x 188 x 94 mm	
Weight 15,6" / 10,4" / 8,4"	<5,2 / <4,1 / <2,9 kg	
Luminance / Contrast / Colors	1000 cd/m ² / 700:1 / 16.7M	variant without touch layer
Protection	IP65 front side / IP50 back side	complies EN 60529

Production variants

COMPONENT	DESCRIPTION
- 8.4"	Display size 8.4" with default resolution 800x600, aspect ratio 4:3
- 10.4"	Display size 10.4" with default resolution 1024x768, aspect ratio 4:3
- 15.6"	Display size 15.6" with default resolution 1366x768, aspect ratio 16:9
/P1	Panel P1 - 10.4", external dimension 310 x 214 mm (UIC 612)
/P2	Panel P2 - 10.4", external dimension 345 x 227 mm (UIC 557)
/P3	Panel P3 - 8.4", external dimension 232 x 188 mm
/P4	Panel P4 - 8.4", external dimension 272 x 204 mm
/P5	Panel P5 - 15.6", external dimension 440 x 262 mm
- K1	Keyboard K1 - 10.4", 32 buttons (UIC 612)
- K2	Keyboard K2 - 10.4", 26 buttons (UIC 557)
- K5	Keyboard K5 - 15.6", 5 buttons
- TC	Touchscreen - Projective Capacitive
- V1	This option includes interfaces: - A - USB2 - ETH2 - RS2
- V2	This option includes interfaces: - USB1 - ETH1 - RS1
- V3	This option includes interfaces: - USB1 - RS1
- CB1	1x CAN bus
- CB2	2x CAN bus
- MVB	Multifunction Vehicle Bus - Redundant EMD

Examples: 1) DPC-10,4"/P1-K1-TC-V1-MVB, 2) DPC-15,6"/P5-K5-TC-V1-CBA

Standards

EN 50155:2007, EN 61373:2010, EN 50121-3-2:2006, EN 50124-1:2001, EN 50125-1:1999, EN 60068-2-1:2007, EN 60068-2-2:2007, UIC 612-01:2011, EN 50126:1999, IEC 61375-1:2012, ISO 11898-2:2003