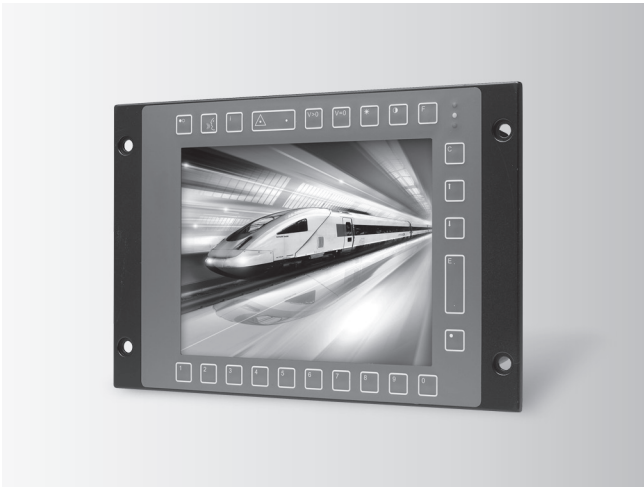


TPC-8100TR

10.4" EN50155 Railway Panel Computer



Features

- 10.4" SVGA 800x600 with 400 nits LED LCD display
- Fanless with Dual core 1.6 GHz processor
- 5H Hardness resistive touch
- Alternative keypad control in front bezel
- Mother board / Daughter board with coating for weather proof
- All around IP65 with waterproof M12 connector
- Optical bonding for weather proofing
- Ruggedized enclosure with Die-cast Aluminium alloy
- Wide operating temperature: -30 ~ 70°C
- EN50155 & EN45545 Compliance for railway application

Introduction

Advantech's HMI TPC-8100TR for transportation is used to keep the train driver informed about status of the train's functions. Its design allows it to be deployed in environments with an extended temperature range (-30 to +70°C) and it also complies with the EMC, shock and vibration test requirements of European standard EN50155 and EN45545 for railway applications.

The TPC-8100TR 10.4" TFT display has a ruggedized touch panel and optical bonding for weather-proofing. All round IP65 and M12 connectors are the perfect choice for Human Machine Interfaces (HMI) in railway environments. The internal boards all have Conformal Coating protection for anti-moisture protection. The TPC-8100TR includes a comprehensive feature set with two Ethernet ports, serial interfaces, USB ports, built-in CFast devices.

Railway power module design support 10 ms interruption (EN50155, S2), EMI EN55022 CLASS A filter, Over/Short current protection for its railway application.

Specifications

General

- **Certification** CE, FCC, CCC, EN50155 Compliance
- **Cooling System** Fanless design
- **Dimensions (W x H x D)** 345x227x85mm (13.58" x 8.94" x 3.35")
- **Enclosure** Front bezel: Die-cast Aluminium alloy
Back housing: Die-cast Aluminium alloy
- **Mounting** Panel Mount / VESA Mount
- **OS Support** WES 7 & 8 / WES 2009 / Windows CE 7.0 / Linux
- **Power Consumption** 35 W Typical
- **Power Input** 72 V_{DC} ~ 110 V_{DC}
48 V_{DC} (option), 24 V_{DC} (option)
- **Weight (Net)** 5 kg (11 lbs)

System Hardware

- **CPU** Intel Atom N2600
- **Memory** 4GB SO-DIMM DDR3 SDRAM
- **Storage** Built in 16G CFast card
- **Expansion Slot** Full-size Mini-pcie slot x 1 (option)
Full-size Mini-pcie slot x 2 (option)
- **I/O** 2 x RS-232 (connection: M12 A-code, 8-pin male)
2 x RS-422/485 (with isolation, connection: M12 A-code, 8-pin male)
2 x USB2.0 (connection: M12 A-code, 8-pin female)
2 x 100/1000 Base (connection: M12 A-code, 8-pin female)
1x Audio (with Internal Buzzer, Line out, connection: M12 A-code, 8-pin male)
1x Power connector (connection: M12 A-code, 5-pin male)

LCD Display

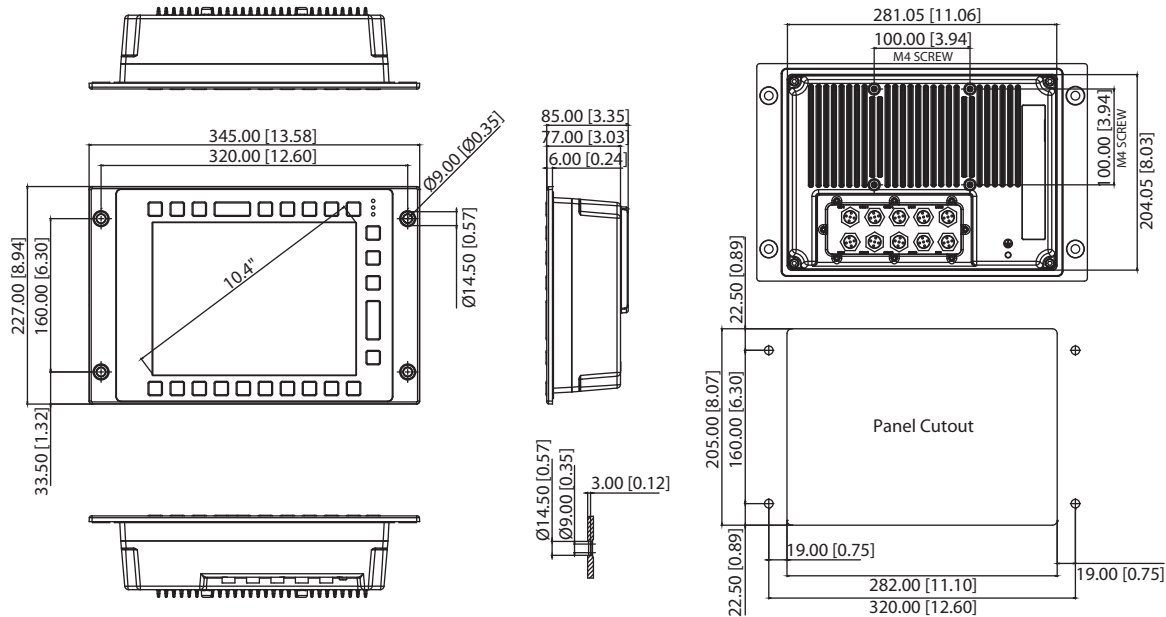
- **Display Type** SVGA TFT LED LCD
- **Display Size** 10.4"
- **Max. Resolution** 800x600
- **Max. Colors** 262 K
- **Luminance cd/m²** 400
- **Viewing Angle (H/V°)** 160/140
- **Backlight Life** 50,000 hrs
- **Contrast Ratio** 700:1
- **Environment** Humidity 10 ~ 95% RH @ 40°C, non-condensing
- **Ingress Protection** All around IP65
- **Operating Temperature** -30 ~ 70°C (-22 ~ 158°F)
- **Storage Temperature** -30 ~ 70°C (-22 ~ 158°F)
- **Vibration Protection** IEC 61373 Railway - Shock and Vibration

Ordering Information

- **TPC-8100TR-N3AE** 10.4" SVGA Touch Panel PC

Dimensions

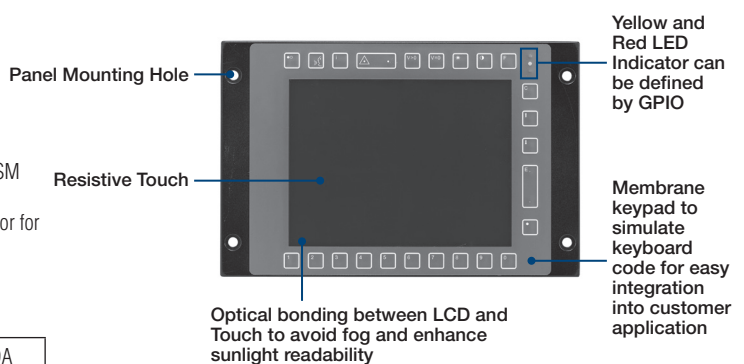
Unit: mm [inch]



Accessories

- 1702002600 Power Cable US Plug 1.8 M
- 1702002605 Power Cable EU Plug 1.8 M
- 1702031801 Power Cable UK Plug 1.8 M
- 1700000596 Power Cable China/Australia Plug 1.8 M
- EWM-C109F6G1E 6-band HSPA Cellular Module, SIM holder+GPS
- 1750006432 GPS antenna 5000mm AG1575-0250SM-UL
- 1750005865 GSM Antenna L=10.9cm 500hm AN8921F-5701SM
- TPC-8100TR-MOKE (9 x M12 Connectors for TPC-8100TR)
- TPC-8100TR-MCKE (9 x M12 Cables supporting standard I/O connector for TPC-8100TR)

Front View



Application Software

WebAccess/SCADA	Advantech WebAccess is a 100% web based SCADA (Supervisory Control And Data Acquisition) software and it acts as an IIoT Platform providing open interfaces for partners to develop IoT applications for different vertical markets. In addition to traditional SCADA functions, WebAccess has an intelligent Dashboard, to provide users with cross-platform, cross-browser data analysis and user interface using HTML5 technology. As well as the built-in widgets, WebAccess also provides Widget Builder to allow customers to build their own.
WebAccess/HMI	WebAccess/HMI is Human Machine Interface (HMI) software based on Microsoft's Windows operating system. It utilizes a PC's ample resources, ie speed, storage, multimedia, peripheral devices, and large screen to produce a complex human-machine interface. WebAccess/HM with its communication and monitoring ability supports more than 350 PLC communication protocols and a wide choice of screen design objects, to satisfy multiple integrations of factory automation and all-round human-machine interface operation and monitoring requirements.

Rear View

