

# TVP-110

Intel® Celeron® Processor J1900, 10.4" Industrial touch panel computer,  
Full M12 vehicle terminal for rail train



A B C D E F  
A: LAN1/2 D: USB  
B: COM1/2 E: Power  
C: DIO F: Audio

## Introduction

Darveen's TVP-110/120 series touch panel PC is a fanless human machine interface (HMI) equipped with a 10.4-inch display with projective capacitive touchscreen aimed at railway applications. The panel's small flat design saves space for easy installation in driver cabins. The configuration flexibly allows the system to be adjusted for specific applications and train models. Designed to withstand operation in harsh environments, TVP-110/120 supports a wide operating temperature range (-40~70 °C), and satisfies EN 50155 railway regulations.

## Features

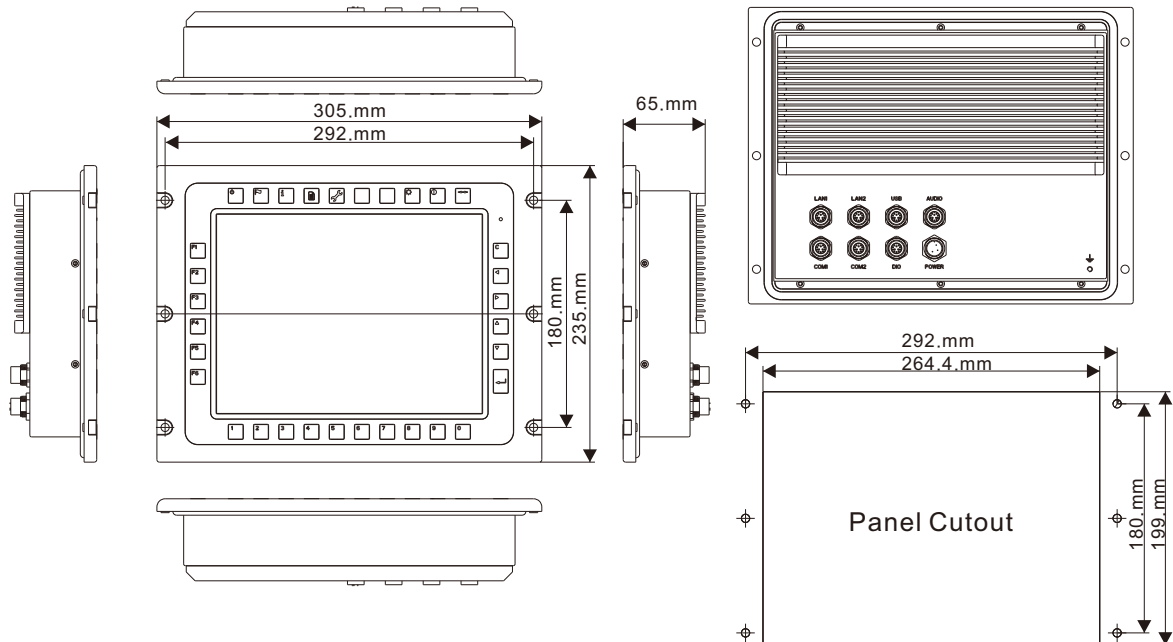
- Intel® Celeron® J1900 CPU (2M Cache, 2.00 GHz)
- 10.4" industrial-grade LCD panel and touch
- M12 Aviation I/O interface
- IP65-rated front panel and fanless design
- Support -40~70°C temperature range
- Support 24/48/72/110Vdc (±40%) power input
- Compliant with UIC 612-01 keyboard layout
- Optional Expansion WiFi, Bluetooth, LTE, GPS, CAN

## Applications

- Rail train display and control panel



## Dimensions



## Specifications

### System

CPU	Intel® Quad-Core Celeron J1900 (2.0GHz)
Memory	1 x SO-DIMM DDR3L-1333/1600 (up to 8GB)
Storage	1 x Full-size Mini-PCIe for mSATA SSD
Operating System	Windows 10 IoT Enterprise Windows Embedded Standard 7 Linux

### Display

Size	10.4-inch
Resolution	1024 x 768
Brightness	500 cd/m <sup>2</sup>
Contrast Ratio	1000:1
LED Lifetime	50000 hrs

### Touchscreen

Type	Projective multi-touch capacitive screen
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### Keypad

Keys	32 keys (See the manual for the definition)
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### I/O Connectors

Serial Port	2 x RS-422/485, 2500Vdc isolation
USB Port	2 x USB2.0
Ethernet	2 x GbE LAN, 2500Vdc isolation
DIO	4 in & 2 out, support 3.3V output, 2500Vdc isolation
Audio	1 x Line-out 1 x Mic-in
Power	1 x DC-in

### Power Specification

Power Input	DC 110V (± 40% , Default, optional 24/48/72V)
Consumption	28W

### Environment

Operating Temperature	-40~70°C
Relative Humidity	5%-90%, @ 40°C (non-condensing)
IP protection	Front panel meet IP65
Vibration	IEC 61373
Certifications	CE, FCC, EN50155:2017

### Physical Characteristics

Mounting Mode	Panel-mount
Dimension (W x L x H)	305 x 235 x 65 mm
Weight	3.2Kg

### Packing List

1 x TVP-110
1 x Certificate
1 x Warranty Cardm