

10.4" Train Vehicle Panel PC with Intel® Celeron® J6412 Processor

Overview

TVP-210 is the latest generation of train vehicle panel pc that comes with Intel Celeron J6412 platform processor. It assembly 10.4-inch industrial capacitive touch screen, small flat design saves space for easy installation in driver cabins.

The modular design of TVP-210 can be built-in WiFi 7, Bluetooth 5.4, LTE, GNSS, etc. It also supports 8 to 36V DC input, and rugged design can meet MIL-STD-810H and EN50155 standards.

Features

- 10.4" TFT-LCD with projective capacitive touch screen
- Compliant with UIC612-01 keyboard layout
- IP65-rated front panel and fanless design
- M12 type aviation connectors
- MIL-STD-810H vibration testing standards compliant
- Wide range 8 to 36VDC power input
- Flexible expansion capability for Wi-Fi 7, Bluetooth 5.4, LTE, GNSS



I/O Interfaces

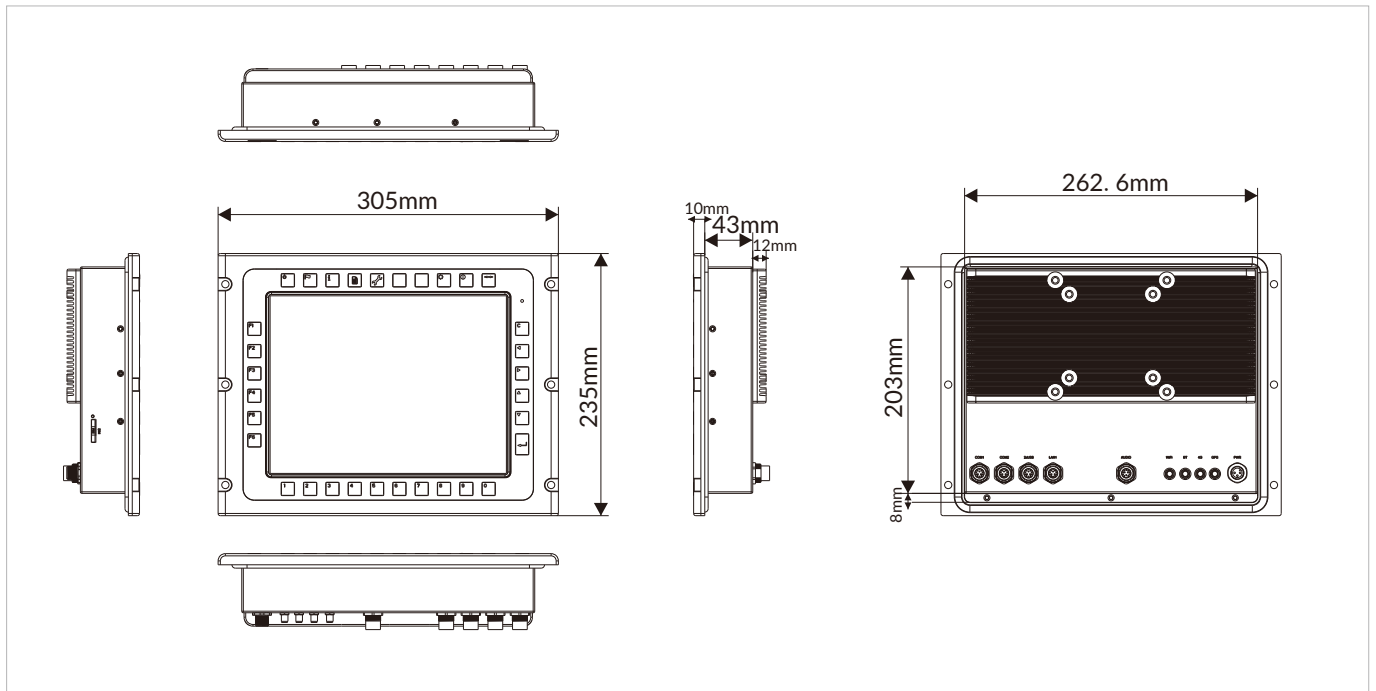


Specifications

Display	
Size	10.4 inch (4:3)
Touch Type	Projected capacitive multi touch
Display Type	TFT LCD
Resolution	1024 x 768
Luminance	600 nits
Contrast Ratio	1000: 1
View Angles	80 (left), 80 (right), 80 (up), 80 (down)
Color	16.7M
System	
CPU	Intel® Celeron® J6412, quad core (2.0GHz)
Chipset	Intel® Elkhart Lake Platform
Memory	4GB DDR4-2666 SO-DIMM (up to 32GB)
Storage	128GB M.2 SSD (up to 2TB)
Graphics	Intel® Iris® Xe Graphics
BIOS	AMI UEFI BIOS
Keypad & Keyboard	
Keypad	32 keys (See the manual for the definition)
I/O Ports	
USB	2x USB 2.0 (M12)
Serial	2x RS-232 (M12)
Ethernet	1x GbE LAN (M12)
Audio	1x Audio in/out (M12)
SIM Card Slot	1x SIM Socket
Antenna	4x SMA connector for external antenna (Wi-Fi, Bluetooth, WWAN, GPS)
RF Communication	
Wi-Fi	Wi-Fi 6E: 802.11a/b/g/n/ac/ax, 2.4G/5G/6G (optional) Wi-Fi 7: 802.11a/b/g/n/ac/ax/be, 2.4G/5G/6G (optional)
Cellular	4G, LTE (optional)
Bluetooth	Bluetooth 5.3 (Depend on Wi-Fi 6E, optional) Bluetooth 5.4 (Depend on Wi-Fi 7, optional)
GNSS	GPS, GLONASS, Galileo, BeiDou (optional, Ublox NEO M8N)
Power	
DC Input	8 to 36VDC
Power Consumption	18W (Typ.)
Power Mode	ATX (default), AT
Operating System	
Windows	Windows 11 IoT Enterprise LTSC Windows 10 IoT Enterprise LTSC Windows 11 Pro"
Linux	Ubuntu
Mechanical	
Dimensions (W x D x H)	305 x 235 x 65 mm (12.01 x 9.25 x 2.56 inches)
Weight (N.W.)	3.2 kg (7.05 lbs)
Mounting Mode	Panel mount, VESA
Material	Aluminum+SGCC

Environment	
Operating Temperature	-30 to 60°C (-22 to 140°F)
Storage Temperature	-40 to 70°C (-40 to 158°F)
Relative Humidity	95% @ 70°C (158°F), non-condensing
Shock	MIL-STD-810H Method 514.8 Procedure I
Vibration	MIL-STD-810H Method 516.8 Procedure I
IP Rating	IP65 compliant (Front panel)
Certification	
EMC	CE, FCC

Dimensions



Optional Accessories

Part No.	Description
PWR836D512-M12	8 to 36VDC Input, 5V/12VDC Output, M12 connector

Ordering Information

Part No.	Description
TVP-210-C401B-A01	TVP-210 + CTP(600) + J6412 + 4GB RAM(HIK) + 128GB M.2(HIK) + WiFi6E(AX210) + Bluetooth(AX210) + 4G(EC20) + GPS(UG-M80) + SMA(1)-WiFi_M + SMA(2)-Bluetooth + SMA(3)-4G_M + SMA(4)-GPS;