

TPC-310W

NEW



Introduction

The TPC-310W thin-client terminal is equipped with 10.1" WXGA TFT LCD, low-power Intel® Atom® x6425E quad-core / Celeron® J6412 quad-core processor with DDR4 SO-DIMM to deliver ultra slim bezel design, fanless system. To enhance the system's durability, TPC-310W features a true-flat touchscreen with IP66-rated front panel, die-cast aluminum alloy front bezel, and P-CAP multi-touch. In addition to supporting a wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F), TPC-310W includes a M.2 2280 NVMe slot for high speed automation application needs.

Specifications

General

▪ BIOS	AMI UEFI
▪ Certification	BSMI, CCC, CE, FCC Class A, UL
▪ Cooling System	Fanless design
▪ Dimensions (W x H x D)	260 x 179 x 50mm (10.23 x 7 x 1.96 inch)
▪ Enclosure	Front bezel: Die cast aluminum alloy Back housing: SECC
▪ Mounting	VESA Mount (75 x 75), Panel, Wall
▪ OS Support	Windows 10/11 Enterprise LTSB, Linux
▪ Security	TPM 2.0 (built-in)
▪ Power Consumption	19.2 W (typical)
▪ Power Input	24V _{DC} ± 20%
▪ Watchdog Timer	1 ~ 255 sec (system)
▪ Weight (Net)	2.6 kg (5.7lb)

System Hardware

▪ CPU	Intel® Elkhart Lake Atom® x6425E, 2.00 GHz, quad core Celeron® J6412, 2.00 GHz, quad core
▪ Memory	1 x DDR4 SO-DIMM (Up to 16G)
▪ LAN	2 x 10/100/1000BASE-T
▪ Expansion Slots	1 x M.2 E Key 2230 (USB/PCIe)
▪ Storage Slots	1 x M.2 M Key 2280 (SATA/PCIe)
▪ I/O	1 x Power receptor 1 x RS-232 1 x RS-232/422/485 2 x USB3.0 2 x USB2.0 1 x Line Out

Slim bezel 10.1" WXGA TFT LCD Thin-Client Terminal with Intel® Atom® X6425E / Celeron® J6412

Features

- Industrial-grade 10.1" WXGA TFT LCD with 50K lifetime and LED backlight
- Intel® Elkhart Lake (EHL) Atom® x6425E Quad-core / Celeron® J6412 Quad-core
- Compact, fanless embedded system with aluminum alloy front bezel
- Wide operating temperature range -20 ~ 60 °C (-4 ~ 140 °F)
- True-flat ultra slim bezel design with IP66 water proof of front panel
- Support high speed M.2 2280 NVMe
- Touchscreen with P-CAP multi-touch control
- Chassis grounding protection

LCD Display

▪ Display Type	WXGA TFT LED LCD
▪ Display Size	10.1"
▪ Max. Resolution	1280 x 800
▪ Max. Colors	16.7M
▪ Luminance cd/m²	500
▪ Viewing Angle (H/V°)	178/178
▪ Backlight Life	50,000 hr
▪ Contrast Ratio	800:1

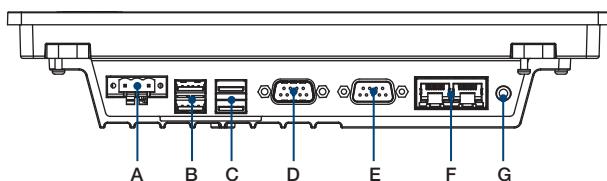
Touchscreen

▪ Light Transmission	90% ± 3%
▪ Type	P-CAP multi-touch

Environment

▪ Relative Humidity	Operating, 95% RH @ 40°C, non-condensing Non-operating, 95% RH @ 60°C, non-condensing
▪ Ingress Protection	Front panel: IP66
▪ Operating Temperature	-20 ~ 60 °C (-4 ~ 140 °F)
▪ Storage Temperature	-30 ~ 70 °C (-22 ~ 158 °F)
▪ Vibration Protection	1 Grms (5 ~ 500 Hz) (Operating, random vibration)

Rear View

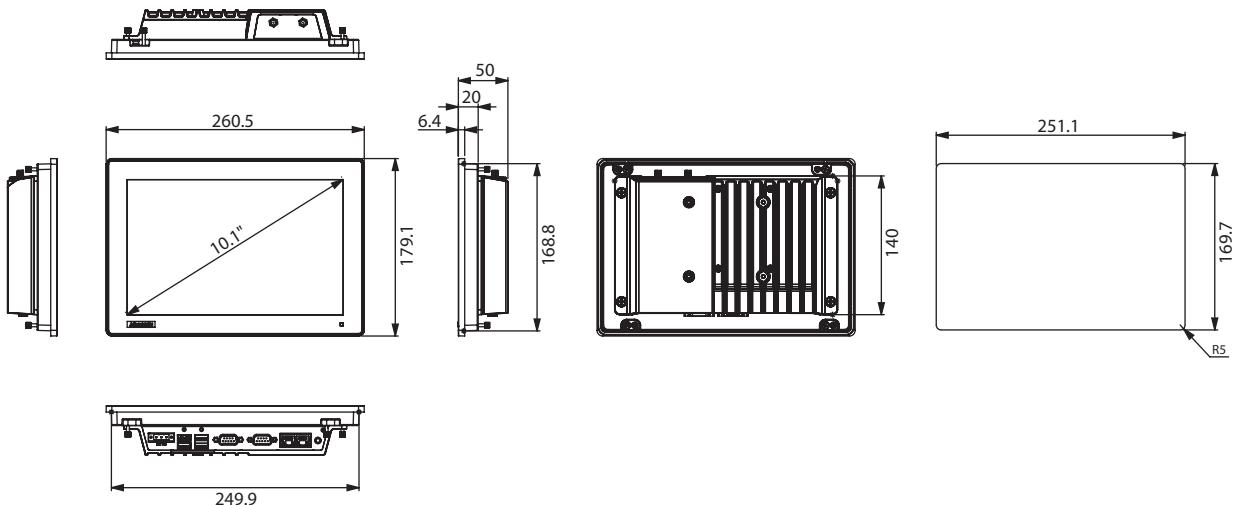


A. Power receptor
B. USB3.0
C. USB2.0
D. RS232

E. RS232/422/485
F. LAN (10/100/1000)
G. Line Out

Dimensions

Unit: mm [inch]

Panel Cutout Dimensions: 251.1 x 169.7mm, corner=R5mm ($\pm 0.5\text{mm}$)

Ordering Information

- **TPC-310W-PE20A** 10.1" WXGA Panel PC with Intel® Atom® x6425E 2.00 GHz quad-core (-20 ~ 60 °C), Made in China
- **TPC-310W-PJ20A** 10.1" WXGA Panel PC with Intel® Celeron® J6412 2.00 GHz quad-core (-10 ~ 60 °C), Made in China
- **TPC-310W-PE20AU** 10.1" WXGA Panel PC with Intel® Atom® x6425E 2.00 GHz quad-core (-20 ~ 60 °C), Made in Taiwan

Optional Accessories

- **PWR-247-DE** 60W 24 V_{DC} /2.5A power supply
- **1702002600-31** Power Cable US Plug 1.8 M
- **1702002605** Power Cable EU Plug 1.8 M
- **1702031801** Power Cable UK Plug 1.8 M
- **1700000596-11** Power Cable China/Australia Plug 1.8 M
- **TPC-WLAN-A1** M.2 AE, WiFi6 + BT5.3, 2T2R,w/Antenna, -40~85°C

Embedded OS

- **20701WX1ES0005** WIN10 LTSC V6.09 B008 for TPC-307W/TPC-310W Entry
- **20701U22DS000** Image AdvLinuxTu-IOTG_x64 V4.0.6 for TTPC series
- **20701WLE1S0009** Img WIN11 LTSC x64 v7.01 B014 TPC-3xxW Entry
- **20701AI0NS0005** Img Android14 X86 for TPC 20250711

TPC-310W Photo



Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries. Please contact Advantech for certificate compliance.