TPC-307W

7" WSVGA TFT LED LCD Thin-Client Terminal with Intel® Elkhart Lake



Features

- Industrial-grade 7" WSVGA TFT LCD with 50K lifetime and LED backlight
- Intel® Elkhart Lake (EHL) Atom™ X6211E 1.30 GHz, dual core processor with DDR4 SO-DIMM
- Compact, fanless embedded system with aluminum alloy front bezel
- Wide operating temperature range -20 ~ 60 °C (-4 ~ 140 °F)
- True-flat, IP66-rated front panel
- Front-facing LED indicators to show operating status
- True-flat touchscreen with P-CAP multi-touch control
- Supports AC/DC input with optional power adapter
- Chassis grounding protection



Introduction

The TPC-307W thin-client terminal is equipped with a 7" WSVGA TFT LCD, low-power Intel® Elkhart Lake (EHL) Atom™ X6211E 1.30 GHz, dual core processor with DDR4 SO-DIMM to deliver high-performance computing in a compact, fanless system. To enhance the system's durability, TPC-307W 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-307W includes a full-size mini PCle slot for extending the system functionalities to satisfy diverse 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) 205 x 146 x 56mm (8 x 5.98 x 2.2 inch)

• **Enclosure** Front bezel: Die cast aluminum alloy

Back housing: SECC

1.5 kg (3.3 lb)

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)

System Hardware

Weight (Net)

■ CPU Intel® Elkhart Lake (EHL)

Atom™ X6211E 1.30 GHz, dual 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/PCle)

Storage Slots
1 x M.2 M Key 2280 (*SATA)

*Only Support M.2 2280 SATA SSD

■ 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

LCD Display

Display Type
VGA TFT LED LCD

Display SizeMax. Resolution7"1024 x 600

• Max. Colors 16.7M • Luminance cd/m² 500

Luminance cd/m² 500
Viewing Angle (H/V°) 160/140

Backlight Life 50,000 hrContrast Ratio 800:1

Touchscreen

• Light Transmission $90\% \pm 3\%$

Type
P-CAP multi-touch

Environment

• **Relative Humidity** Operating, 95% RH @ 40°C, non-condensing

Non-operating, 95% RH @ 60°C, non-condensing

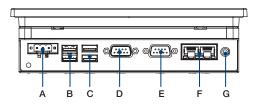
• Ingress Protection Front panel: IP66

Operating Temperature $-20 \sim 60 \, ^{\circ}\text{C} \, (-4 \sim 140 \, ^{\circ}\text{F})$

Storage Temperature -30 ~ 70 °C (-22 ~ 158 °F)
Vibration Protection With M.2 2242: 1 Grms (5 ~ 500 Hz)

(Operating, random vibration)

Rear View



A. Power receptor

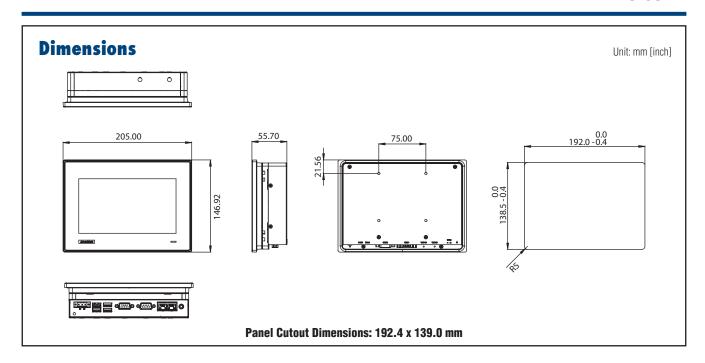
B. USB3.0

C. USB2.0

D.RS232

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

G. Line Out



Ordering Information

TPC-307W-PE20A 7" WSVGA Panel PC, Atom X6211E 1.3 GHz, Made in China TPC-307W-PE20AU 7" WSVGA Panel PC, Atom X6211E 1.3Ghz, Made in Taiwan

Optional Accessories

PWR-247-DE $60W 24 V_{DC} / 2.5A$ power supply Power Cable US Plug 1.8 M 1702002600-31 **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 B005 for TPC-307W Entry 20701WLE1S0009 Img WIN11 LTSC x64 v7.01 B014 TPC-3xxW Entry 20701U22DS0004 Image AdvLinuxTu-IOTG_x64 V4.0.6 for TTPC series

Application Software



HMINavi Designer is a powerful and intuitive software program for creating comprehensive human machine interface solutions. HMINavi Designer is an easily integrated development tool with proven value in many application fields. The features include solution-oriented screen objects, high-end vector graphics, Windows fonts for multi-language applications, receipts, alarm functions, as well as data and operation logging capabilities. HMINavi Designer also supports utility programs such as Data Transfer Helper (DTH), recipe editor, and text editor. The HMINavi Designer software is free download for usage, user can directly download before purchase. With online/offline simulation user can directly connect to PLC controller to ensure solid connection and screen design without any issue. HMINavi Runtime, a component of HMINavi, guarantees the reliability and performance of Open Platform because of the minimum system overhead, high data communication rates, sub-second screen switching, and 24/7 operation. Additionally, Advantech's fast response software team is continually adding new functions, communication drivers, and solutions to the software to meet dynamic needs

TPC-307W 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.