

TPC-125H

12" XGA TFT LED LCD Thin-Client Terminal with Intel® Atom™ Processor and UL Class 1, Division 2



Features

- Industrial-grade 12" XGA TFT LCD with 50K lifetime and LED backlight
- Intel® Atom™ E3845 1.91 GHz quad-core processor with 4 GB DDR3L SDRAM and 64 GB SSD
- UL C1D2 certified HMI for Hazardous environments
- In-cabinet Design with True-flat touchscreen with 5-wire resistive touch control and IP66-rated front panel
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- Front-facing LED indicators to show operating status
- Advantech iDoor technology and SSD/HDD bay
- Compact, fanless system with aluminum alloy front bezel and chassis grounding protection
- Supports VESA mount (100 x 100 mm)
- Hazardous Location Designation Group A, B, C, D, T4

Introduction

The TPC-125H thin-client terminal is Equipped with a 12" XGA TFT LED LCD, low-power Intel® Atom™ E3845, 1.91GHz, quad-core processor, 4 GB DDR3L SDRAM and 64 GB SSD, TPC-125H delivers high-performance computing in a compact, fanless system. For enhanced durability to satisfy diverse industrial automation applications, TPC-125H supports a wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F) and features a true-flat 5-wire resistive touchscreen with IP66-rated front panel, die-cast aluminum alloy front bezel, and 100 x 100 VESA mount kit. TPC-125H has been C1D2 certified for the applications in hazardous environments. Moreover, with the provision of a full-size mini PCIe slot that supports mSATA signals and Advantech's iDoor technology, TPC-125H can be easily expanded to provide additional I/O ports, isolated digital I/O, fieldbus protocols, MRAM, and 3G/GPS/GPRS/Wi-Fi communication capabilities.

Specifications

General

- BIOS** AMI UEFI
- Certification** BSMI, CCC, CE, FCC Class A, UL, UL C1D2
- Cooling System** Fanless design
- Dimensions (W x H x D)** 311.8 x 238 x 55.4 mm (12.28 x 9.37 x 2.18 in)
- Enclosure** Front bezel: Die-cast aluminum alloy
Back housing: SECC
- Mount Options** Panel Mount
- OS Support** Windows 7, Windows 10
- Power Consumption** Typical 25W, 43.8W max.
- Power Input** 24 VDC +/- 20%
- Watchdog Timer** 1 ~ 255 sec (system)
- Weight (Net)** 3.12 kg (6.88 lb)

System Hardware

- CPU** Intel® Atom™ E3845, 1.91 GHz, quad core
- Memory** 1 x SODIMM with 4 GB DDR3L SDRAM (up to 8 GB)
- LAN** 2 x Intel® I210; 10/100/1000 BASE-T
- Expansion Slots**
- Storage** 1 x 2.5" SATA 64 GB SSD
- I/O** 1 x RS-232
1 x RS-232/422/485
1 x USB 3.0
3 x USB 2.0

LCD

- Display Type** XGA TFT LED LCD
- Display Size** 12"
- Max. Resolution** 1024 x 768
- Max. Colors** 16.2M
- Luminance** 600 cd/m²
- Viewing Angle (H/V°)** 178/178
- Backlight Life** 50,000 hr
- Contrast Ratio** 1000:1

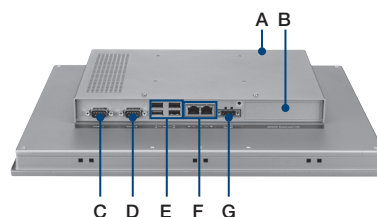
Touchscreen

- Lifespan** 36 million touches at a single point
- Light Transmission** Above 75%
- Resolution** Linearity
- Type** 5-wire analog resistive

Environment

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

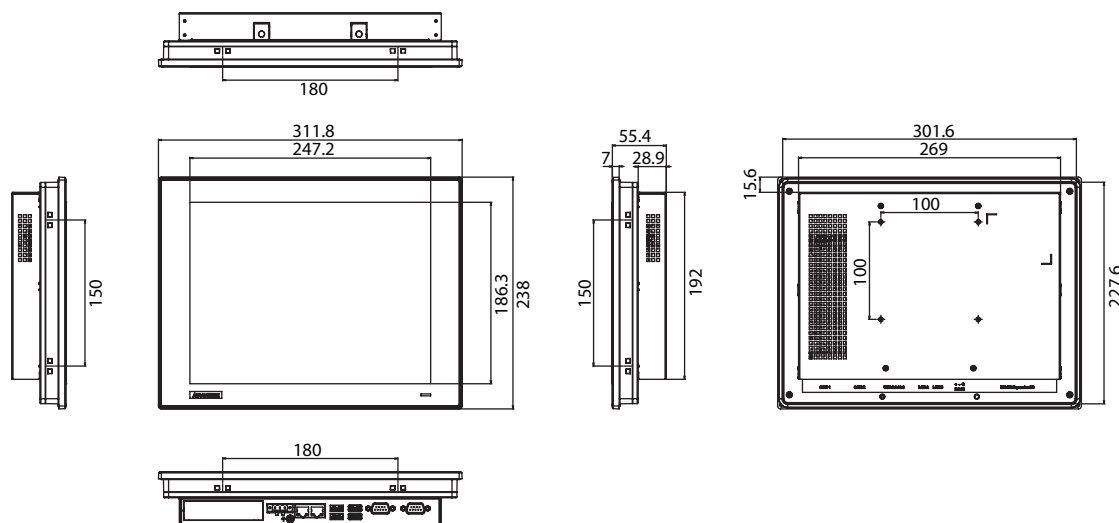
Rear View



- A. HDD/SSD bay
- B. iDoor Slot (Not Expandable)
- C. RS-232
- D. RS-232/422/485
- E. USB 2.0 and 3.0
- F. LAN
- G. Power input

Dimensions

Unit: mm


Panel Cutout Dimensions: 303 x 229 mm (11.93 x 9.02 in)

Ordering Information

- **TPC-125H-E3BE** 12" XGA panel PC with Intel® Atom™ E3845, 1.91 GHz quad-core CPU, 4 GB DDR3L SDRAM, 64 GB SSD, and true-flat touchscreen, C1D2 certified

Embedded OS

- **20703WE7PS0027** TPC-xx51T(B) WS7P x86 MUI Image V4.19
- **20703WE7PS0028** TPC-xx51T(B) WS7P x64 MUI Image V4.19
- **20703WX9ES0028** Img W10 LTSC 2019 V6.05 B027 TPC-1x5H-ExBE Entry

Optional Accessories

- **PWR-247-DE** 60 W, 24 VDC /2.5A power supply
- **1702002600** Power cable (US) 1.8 M
- **1702002605** Power cable (EU) 1.8 M
- **1702031801** Power cable (UK) 1.8 M
- **1700000596-11** Power cable (China/Australia) 1.8 M

Packing List

Item	Part No.	Description	Qty
Grounding cable	1703011001-11	A Cable G-TEM 4.3 100CM C=GR/Y	1pcs
Plug-In Block	1656303100	HOUSING 5.08MM 3P 90D(M) 2ESDVM-03P	1pcs
Manual	2003T51B00	User manual SC for TPC-xx51 B 1st ed	1pcs
Warranty	2190000902	CARDBOARD-WARRANTY REV. A0	1pcs
VESA Screw	1930005204	Screw M4x10L R/S DH=6.8x2.50 + ST ZBK PL	4pcs
M-SATA&WIFI Screw	1930000198	Screw M2x4L F/S D=4.3 H=0.8 (1+) ST Ni NK	3pcs
HDD Screw	19330304A0	Screw M3*4L RF/S D=6.9 H=1.9 + ST Ni NK	4pcs
Idoor Screw	1930002161	Screw M3x4.0(10.0)L R/S D=5.3 H=2 2+ ST BZn	2pcs
HDD WASHER	1990032871S000	Transistor Washer_Safety 1T TW-39 for PPC-3100	4pcs
Clamp	1962055040	CLAMPER PPC-55 M1632611 A0	8pcs
Clamp Screw	1935042520	Screw M4x25L R/S D=8.3 H=2.5 (2+) ST BZn	8pcs
China RoHS	202KAKMC00	China rohs for AKMC model name 1st ed	1pcs

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.