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
- Compact, fanless system with aluminum alloy front bezel and chassis grounding protection
- 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. TPC-125H has been C1D2 certified for the applications in hazardous environments.

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
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

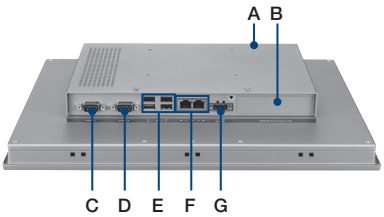
Touchscreen

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

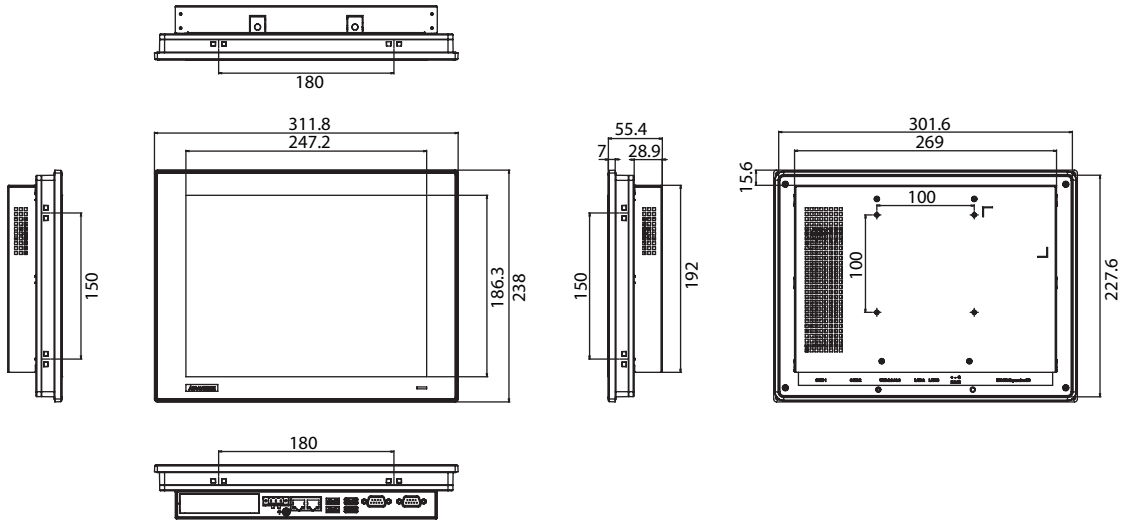


A. HDD/SSD bay
B. iDoor Slot (Not Expandable)
C. RS-232
D. RS-232/422/485
E. USB 2.0 and 3.0
F. LAN
G. Power input

All product specifications are subject to change without notice.

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.