TPC-1251T

12.1" TFT LED LCD Intel® Atom™ Thin Client Terminal



Features

- Industrial 12.1" XGA TFT LCD with 50K Lifetime LED Backlight
- Intel® Atom™ E3827 1.75 GHz Processor with 4GB DDR3L SDRAM
- Supports wide operating temperatures -20~60°C
- True-flat with IP66 / non-flat with IP65 certified front panel protection
- Front LED Indicator to Show Operating Status
- Durable 5-wire Resistive Touch Screen
- Full-size Mini PCle Expansion Support
- Supports iDoor technology for diverse applications (optional accessory required)
- Compact Fanless Embedded System with Al Alloy Front Bezel, Chassis Grounding Protection
- Supports Advantech SNMP Subagent
- Supports Advantech SusiAccess Remote Device Management Software

Introduction

The TPC-1251T thin client terminal with a 12.1" XGA LCD, low power embedded Intel® Atom™ E3827 1.75 GHz Processor and 4GB (8GB optional) DDR3L SDRAM provides computing performance in a compact fanless system. To enhance its durability, the TPC-1251T is true-flat touch screen designed with IP66 front protection, die-cast Al Alloy front bezel and 5-wire resistive touch. It supports wide operating temperatures -20~60°C and includes full size mini-PCle slot to extend the functionality and meet a variety of automation applications needs. Through the Mini-PCle slot, Advantech iDoor technology (optional) can provide more I/O connectors, Isolated Digital IO, the Fieldbus Protocol, 3G/GPS/GPRS/Wi-Fi Communication and Battery-backup MRAM.

Specifications

General

• BIOS AMI UEFI

Certification
 BSMI, CCC, CE, FCC Class A, UL

• Cooling System Fanless design

Dimensions (W x H x D) 311.80 x 238 x 57.2 mm (12.28" x 9.37" x 2.25")

• Enclosure Front bezel: Die-cast Aluminum alloy

Back housing: SECC

Mounting Desktop, Wall or Panel Mount

32bit/64bit / Windows 8 64 bit / Linux Kernel 3.x

Power Consumption
 Power Input
 45.6 W (Typical)
 24 V_{DC} +/- 20%

• Watchdog Timer 1 ~ 255 sec (system)

• Weight (Net) 2.5 KG

System Hardware

CPU Intel® Atom™ E3827 1.75 GHz Processor
 Memory 4GB (8GB optional) DDR3L 1600MHz SO-DIMM

SDRAM

LAN 10/100/1000 Base-T x 2
 Expansion Slots Full-size Mini PCI-E

Storage CFast slot x 1

2.5" SATA SSD slot x 1 (optional)

■ **I/O** RS-232 x 1, RS-232/422/485 x 1

USB 3.0 x 1 USB 2.0 x 1

LCD Display

Display Type
 Display Size
 Max. Resolution
 Max. Colors
 Luminance cd/m²
 Viewing Angle (H/V°)
 Backlight Life
 S0.000 hrs

Touchscreen

Contrast Ratio

Lifespan 36 million touches at single point

700:1

Light Transmission Above 75%
 Resolution Linearity

• Type 5-wire, analog resistive

Environment

Humidity
 10 ~ 95% RH @ 40°C, non-condensing

Ingress Protection
Operating Temperature
Storage Temperature
Vibration Protection

Front panel: IP66

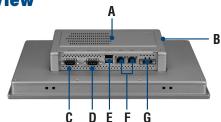
-20 ~ 60°C (-4 ~ 140°F)

-30 ~ 70°C (-22 ~ 158°F)

With CFast: 2 Grms (5-500 Hz)

With HDD: 1 Grms (5 ~ 500 Hz) (Operating, random vibration)

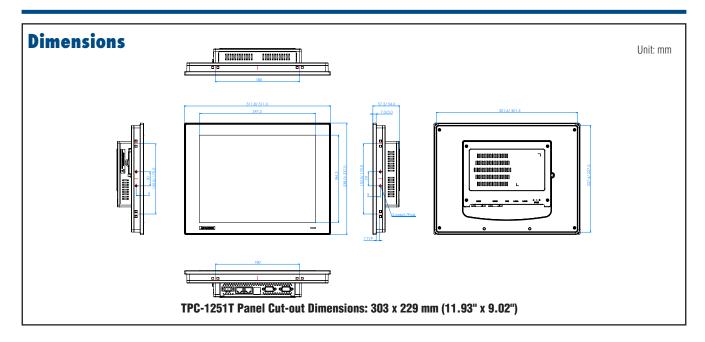
Rear View



A. External HDD/iDoor kit (TPC-1251T-EHKE) (Optional)

B. CFast C. RS-232 D. RS-232/422/485 E. USB 3.0 & 2.0 F. LAN (10/100/1000) G. Power Receptor

Automation Panel PCs



Ordering Information

■ TPC-1251T-E3AE 12" XGA Panel PC, Intel® Atom™ E3827 1.75 GHz

Processor, 4GB (True-flat touch screen)

 TPC-1251H-E3AE 12" XGA Panel PC, Intel® Atom™ E3827 1.75 GHz Processor, 4GB (Non-flat touch screen IP65 certified

traditional TPC front panel)

Accessories

■ PWR-247-BE 63W DC 24V/2.62A Output Power Supply

■ TPC-1251T-EHKE HDD and iDoor extension kit **1702002600** Power Cable US Plug 1.8 M **1702002605** Power Cable EU Plug 1.8 M **1702031801** Power Cable UK Plug 1.8 M

1700000596 Power Cable China/Australia Plug 1.8 M ■ TPC-1000H-WMKE TPC VESA Mounting Kit from 10" to 17" TPC

■ TPC-1000H-SMKE TPC Stand kit from 10" to 17" TPC

Automation S/W & Embedded O/S

2070013519 TPC-xx51T/H WS7P x64 MUI Image v4.12 **2070013613** TPC-xx51T/H WS7P x86 MUI Image v4.12 TPC-1251T/H WEC7 x64 MUI Image V4.00 **2070013595** 968WEXP003X PanelExpress V2.0 300 tags S/W license 968WEXP015X PanelExpress V2.0 1500 tags S/W license 968WEXP050X PanelExpress V2.0 5000 tags S/W license 968WEXP2USB PanelExpress V2.0 S/W USB dongle

iDoor Modules (TPC-1251T-EHKE is required for iDoor modules)

PCM-26D2CA SJA1000 CANBus, CANOpen, DB9 x 2 PCM-26D1PB Hilscher netX100 FieldBus, ProfiBus, DB9 x 1 ■ PCM-27D24DI Digital I/O, 16 DI / 8 DO, Isolation, DB37 x 1 PCM-24D2R4 OXPCIe-952 UART, Isolated RS-422/485, DB9 x 2 PCM-24D2R2 OXPCIe-952 UART, Isolated RS-232, DB9 x 2 PCM-24R2GL 2 Port Giga LAN Intel i350 PCIe mini card PCM-24R1TP Intel 82574L, GbE, IEEE 1588 PTP, RJ45 x 1

Application Software

susiÂccess	Version: V2.1 or above An innovative remote device management software, allowing efficient remote monitoring, quick recovery & backup, and real-time remote configuration, to create a more intelligent and interconnected embedded computing solution.
WebAcc ss	Version: V7.1 or above WebAccess, as the core of Advantech's IoT solution, is full web browser-based software package for HMI and SCADA software. All HMI and SCADA software features including: Animated Graphics Displays, Real-time Data, Control, Trends, Alarms and Logs, are available in a standard web browser. WebAccess is built around the latest internet technologies. With its open architecture, vertical domain applications can easily be integrated.
PANELEXPRESS Designed for Convenience	Version: V2.0.3.8 or above Panel Express, a windows based HMI mini SCADA, realizes the cross platform flexibility offered by WebOP Designer to switch hardware for the consideration of cost and performance become an easy job. Panel Express software provides the best economic and express solution for data intensive high-end HMI applications.
Webop	Version: V2.0.3.8 or above An easy to use integrated development tool featuring solution-oriented screen objects, high-end graphics, Windows fonts for multi-language applications. WebOP runtime, a part of WebOP Designer, guarantees reliability and performance because of the minimum system overhead, high communication data rates, and sub-second screen switching.