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 (8GB optional) DDR3L
- Support wide operating temperatures -20~60°C
- Compact Fanless Embedded System with Al Alloy Front Bezel
- True-flat with IP66 / non-flat with IP65 certified front panel protection
- Durable 5-wire Resistive Touch Screen
- Full-size Mini PCle Expansion Support
- Supports iDoor technology for diverse applications (optional accessory
- Chassis Grounding Protection
- Supports USB 3.0



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")

Front bezel: Die-cast Aluminum alloy Enclosure

Back housing: SECC

Desktop, Wall or Panel Mount Mounting

Microsoft® Windows WES7 32bit/64bit /WE8S 64bit / OS Support

Windows 7 32bit/64bit / Windows 8 64 bit / Linux Kernel

 Power Consumption 18 W (Typical) Power Input 24 V_{DC} +/- 20%

1 ~ 255 sec (system) Watchdog Timer Weight (Net) 2.5 KG

System Hardware

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

SDRAM

10/100/1000 Base-T x 2 Full-size Mini PCI-E **Expansion Slots** Storage CFast slot x 1

2.5" SATA SSD slot x 1 (optional)

RS-232 x 1, RS-232/422/485 x 1 I/0

> USB 3.0 x 1 USB 2.0 x 1

LCD Display

 Display Type XGA TFT LED LCD Display Size 12.1" Max. Resolution 1024 x 768 16.2M Max. Colors Luminance cd/m² 600 Viewing Angle (H/V°) 160/140 Backlight Life 50.000 hrs **Contrast Ratio** 700:1

Touchscreen

Lifespan 36 million touches at single point

Light Transmission Above 75% Resolution Linearity

Type 5-wire, analog resistive

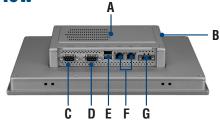
Environment

- Humidity 10 ~ 95% RH @ 40°C, non-condensing Ingress Protection Front panel: IP66

Operating Temperature -20 ~ 60°C (-4 ~ 140°F) -30 ~ 70°C (-22 ~ 158°F) Storage Temperature Vibration Protection

With CFast: 2 Grms (5~500 Hz) With HDD: 1 Grms (5 ~ 500 Hz) (Operating, random vibration)

Rear View



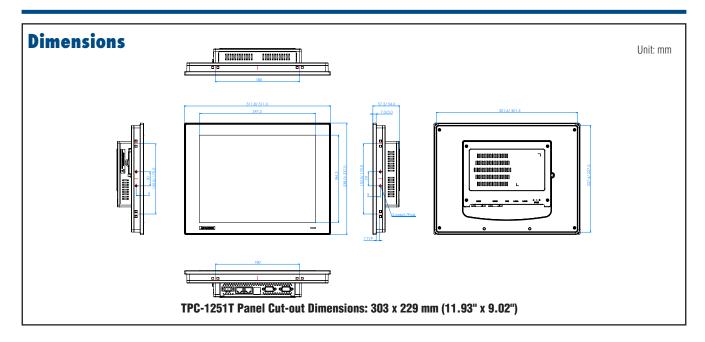
A. Extermal HDD/iDoor kit (TPC-1251T-EHKE) (Optional)

E. USB 3.0 & 2.0 F. LAN (10/100/1000) B. CFast G. Power Receptor

C.RS-232

D. RS-232/422/485

ADVANTECH



Ordering Information

■ TPC-1251T-E3AE 12" XGA Panel PC, Intel® Atom™ E3827 1.75 GHz Processor, 4GB (True-flat touch screen)

Accessories

PCM-24S2WF

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 Software

 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 OXPCIe-952 UART, Isolated RS-422/485, DB9 x 2 PCM-24D2R4 PCM-24D2R2 OXPCIe-952 UART, Isolated RS-232, DB9 x 2 2 Port Giga LAN Intel i350 PCle mini card PCM-24R2GL PCM-24R1TP Intel 82574L, GbE, IEEE 1588 PTP, RJ45 x 1 PCM-23U1DG USB Slot /w Lock for USB Dongle

802.11 a/b/g/n 2T2R w/ BT4.0, Atheros AR9462

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.
WebAccess	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.
PANEL EXPRESS 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.