TPC-1751T

17" TFT LED LCD Intel® Atom™ Thin Client Terminals





- Industrial 17" SXGA TFT LCD with 50K Lifetime LED Backlight
- Intel® Atom™ E3827 1.75 GHz Dual-core/Intel® Celeron® J1900 2 GHz Quad-core 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
- 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-1751T thin client terminal with a 17" SXGA LCD, low power embedded Intel® Atom™ E3827 1.75 GHz Dual-core/Intel® Celeron® J1900 2 GHz Quad-core Processor and 4GB DDR3L SDRAM provides computing performance in a compact fanless system. To enhance its durability, the TPC-1751T 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) 413.7 x 347.2 x 63.8 (16.28" x 13.68" x 2.5")

Front bezel: Die-cast Aluminum alloy Enclosure

Back housing: SECC Desktop, Wall or Panel Mount Mounting

Microsoft® WES7 64bit / WE8S 64bit / Windows 7 OS Support

32bit/64bit, Windows 8.1 32bit/64bit

Intel® Atom™ E3827 1.75 GHz Dual-core Processor

 Power Consumption 43.2 W (Typical) 24 V_{DC} +/- 20% Power Input

Watchdog Timer 1 ~ 255 sec (system)

Weight (Net) 4 KG

System Hardware

- CPU

Intel® Celeron® J1900 2 GHz Quad-core Processor 1 x SO-DIMM with 4GB DDR3L SDRAM (supports up to Memory

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 SXGA TFT LED LCD

Display Size 17"

Max. Resolution 1280 x 1024 16.7 M Max. Colors Luminance cd/m² 350

 Viewing Angle (H/V°) 160/140 Backlight Life 50.000 hrs

Contrast Ratio 800:1

Touchscreen

Lifespan 36 million touches at single point

Light Transmission Above 75% Resolution Linearity

Type 5-wire, analog resistive

Environment

- Humidity

Ingress Protection

Operating Temperature

Storage Temperature

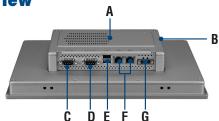
Vibration Protection

10 ~ 95% RH @ 40°C, non-condensing

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



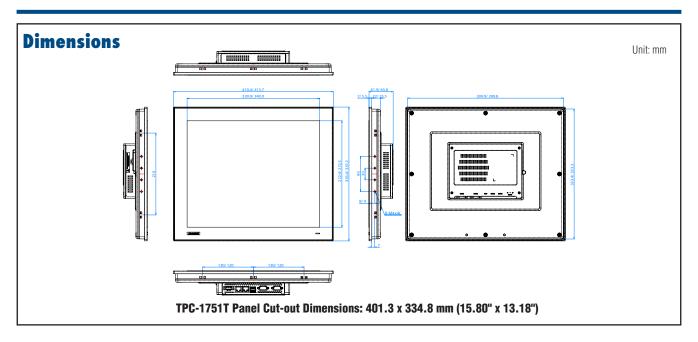
A. External HDD/iDoor kit (TPC-1251T-EHKE) (Optional) B. CFast

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-1751T-E3AE 17" SXGA Panel PC, Intel® Atom™ E3827 1.75 GHz Dual-core Processor, 4GB (True-flat touch screen)

TPC-1751H-E3AE 17" SXGA Panel PC. Intel® Atom™ E3827 1.75 GHz Dual-core Processor, 4GB (Non-flat touch screen IP65

certified traditional TPC front panel)

TPC-1751T-J3AE 17" SXGA Panel PC, Intel® Celeron J1900 2 GHz Quad-core Processor, 4GB (True-flat touch screen, 0~50 operating temperature support)

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 VESA Mounting Kit from 10" to 17" TPC TPC-1000H-WMKE

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

Automation S/W & Embedded O/S

2070013876 TPC-xx51T/H WS7P x64 MUI Image v4.13 2070013613 TPC-xx51T/H WS7P x86 MUI Image v4.12 2070013827 TPC-1251T/H WEC7 x64 MUI Image V4.00 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 OXPCle-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 PCle mini card Intel 82574L, GbE, IEEE 1588 PTP, RJ45 x 1 PCM-24R1TP PCM-24S2WF 802.11 a/b/g/n 2T2R w/ BT4.0, Atheros AR9462

Application Software

WebAccess	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.
Panel Express	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.
Webop	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.
WebAccess/NMS	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.
susiÂccess	Visualizing device and platform network connectivity conditions and offering easier firmware and configuration solutions to ensure stable network connections.