# TPC-1551T

## 15" XGA TFT LED LCD Thin-Client Terminal with Intel® Atom™ Processor



## **Features**

- Industrial-grade 15" XGA TFT LCD with 50K lifetime and LED backlight
- Intel® Atom™ E3827 1.75 GHz dual-core processor with 4 GB DDR3L SDRAM
- Wide operating temperature range -20 ~ 60 °C (-4 ~ 140 °F)
- True-flat touchscreen with IP66-rated front panel/non-flat touchscreen with IP65-rated front panel
- Front-facing LED indicators to show operating status
- Durable touchscreen with 5-wire resistive touch control
- Supports Advantech's iDoor technology for integrating optional accessories
- Compact, fanless embedded system with aluminum alloy front bezel and chassis grounding protection
- Supports Advantech's SNMP Subagent software
- Supports Advantech's WISE-PaaS/RMM remote management software



## Introduction

The TPC-1551T thin-client terminal is equipped with a 15" XGA TFT LCD, low-power Intel® Atom™ E3827 1.75 GHz dual-core processor, and 4 GB DDR3L SDRAM to deliver highperformance computing in a compact, fanless system. For enhanced durability, TPC-1551T features a true-flat touchscreen with IP66-rated front panel, die cast aluminum alloy front bezel, and 5-wire resistive touch control. In addition to supporting a wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F), TPC-1551T includes a full-size mini PCle slot for extending the system functionalities to satisfy diverse automation application needs. Moreover, Advantech's iDoor technology can be integrated via the mini PCIe slot in order to provide additional I/O connectors, isolated digital I/O, fieldbus protocols, 3G/GPS/GPRS/Wi-Fi communication, and MRAM.

## **Specifications**

#### General

BIOS AMI UEFI

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

 Cooling System Fanless design

**Dimensions (W x H x D)** 383.20 x 307.30 x 61.10 mm (15.09 x 12.10 x 2.41 in)

Front bezel: Die cast aluminum alloy Enclosure Back housing: SECC

Mounting Desktop, Wall or Panel Mount

Microsoft® WES7 (32/64-bit), Windows 7 (32/64-bit), OS Support

Windows 10 Enterprise LTSB

 Power Consumption 40.8 W (typical) 24 V<sub>DC</sub> +/- 20% Power Input

Watchdog Timer 1 ~ 255 sec (system) Weight (Net) 3.9 kg (8.59 lb)

### **System Hardware**

- CPU Intel® Atom™ E3827 1.75 GHz dual-core processor 1 x SODIMM with 4 GB DDR3L SDRAM (supports up to Memory

8 GB) LAN

10/100/1000BASE-T x 2 **Expansion Slots** Full-size mini PCle

1 x CFast Storage

1 x 2.5" SATA SSD (optional)

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

1 x USB 3.0

1 x USB 2.0

#### **LCD** Display

Display Type XGA TFT LED LCD Display Size 15' Max. Resolution 1024 x 768 16.7M Max. Colors Luminance cd/m<sup>2</sup> 400 Viewing Angle (H/V°) 160/140 **Backlight Life** 50.000 hr

#### Touchscreen

**Contrast Ratio** 

Lifespan 36 million touches at a single point

700:1

**Light Transmission** Above 75% Resolution Linearity

Type 5-wire analog resistive

#### **Environment**

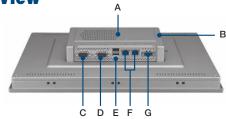
 Humidity 10 ~ 95% RH @ 40°C, non-condensing

**Ingress Protection** Front panel: IP66 **Operating Temperature** -20 ~ 60 °C (-4 ~ 140 °F)

-30 ~ 70 °C (-22 ~ 158 °F) Storage Temperature With CFast: 2 Grms (5~500 Hz) Vibration Protection

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

**Rear View** 

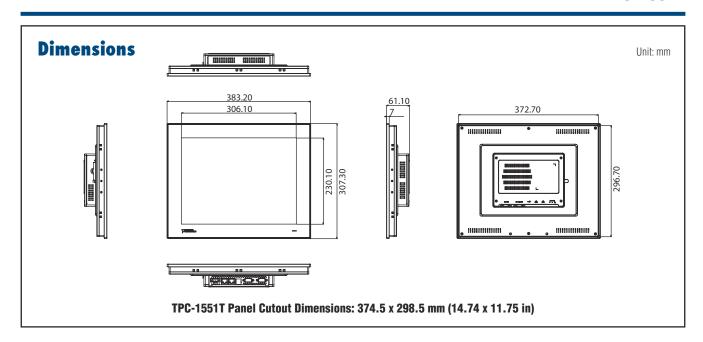


D.RS-232/422/485

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

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

Online Download www.advantech.com/products



# **Ordering Information**

• TPC-1551T-E3AE 15" XGA Panel PC, Intel® Atom™ E3827 1.75 GHz
Dual-core Processor, 4GB (True-flat touchscreen)

• TPC-1551H-E3AE 15" XGA Panel PC, Intel® Atom™ E3827 1.75 GHz
Dual-core Processor, 4GB (Non-flat touchscreen IP65 certified traditional TPC front panel)

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# **Optional Accessories**

PWR-247-CE
 TPC-1251T-EHKE
 HDD/SSD 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

1700000596-11 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

## **Embedded OS**

20703WE7PS0004 TPC-xx51T/H WS7P x64 MUI Image V4.18
 20703WE7PS0005 TPC-xx51T/H WS7P x86 MUI Image V4.18
 2070015041 TPC-xx51T-(6)xxAE Win10 2016LTSB V6.01 image
 2070014677 TPC-1251T/H WEC7 x64 MUI Image V4.01

## S/W Bundle Offering

 WA-HT1551T-E15H1AE TPC-1551T-E3AE, HMI Runtime 1500 tags, 32G CFast, WES7P

 WA-ST1551T-E15H4AE TPC-1551T-E3AE, SCADA Runtime 1500 tags, 1TB HDD, WES7P

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

PCM-26D2CA-AE
 PCM-26D1DB-MAE
 PCM-27D24DI-AE
 PCM-24D2R4-AE
 SJA1000 CANBus, CANOpen, DB9 x 2
 Hilscher netX100 FieldBus, ProfiBus, DB9 x 1
 Digital I/O, 16 DI / 8 DO, Isolation, DB37 x 1
 OXPCIe-952 UART. Isolated RS-422/485. DB9 x 2

PCM-24D2R2-AE
 PCM-24R2GL-AE
 PCM-24R2GL-AE
 OXPCIe-952 UART, Isolated RS-232, DB9 x 2
 PCM-24R2GL-AE
 2 Port Giga LAN Intel i350 PCIe mini card

PCM-24R1TP-AE
 Intel 82574L, GbE, IEEE 1588 PTP, RJ45 x 1
 PCM-24S2WF-BE
 802.11 a/b/g/n/ac 2T2R w/BT4.1, Atheros QCA6174A

# **Application Software**

#### Advantech WebAccess/SCADA is a 100% browser-based IIoT software platform aimed at supervisory control and data acquisition (SCADA) operations. WebAccess/SCADA provides open interfaces that allow our customers and partners to develop unique IoT applications for different vertical WebAccess/SCADA markets. In addition to supporting traditional SCADA functions, the platform features an HTML5-based user interface and intelligent dashboard to facilitate cross-platform, cross-browser data analysis. Moreover, WebAccess/SCADA not only offers built-in widgets, but is also equipped with an innovative Widget Builder that enables customers to build their own widgets. Advantech WebAccess/HMI is human-machine interface (HMI) software based on Microsoft's Windows operating system. This software features excellent communication and monitoring capabilities, supports WebAccess/HMI more than 350 PLC communication protocols, and offers a wide choice of screen design objects to satisfy diverse integrations of factory automation and HMI operation and monitoring requirements.