TPC-1551T(B) SR

15" XGA Sunlight Readable LCD Intel® Atom™ Thin Client Terminal

NEW

Features

- 15" XGA High Brightness LED backlight with optical bonding solution
- Intel® Atom™ E3845 1.91GHz Quad-core Processor with 4GB DDR3L SDRAM
- Built-in light sensor for auto LCD brightness adjustment
- Supports wide operating temperatures of -20~60°C (-4~140 °F)
- True-flat with IP66 front panel protection
- Front LED indicator shows operating status
- Durable 5-wire resistive touch screen
- Full-size mini PCIe expansion support
- Supports iDoor technology for diverse applications (optional accessory required)
- Compact fanless embedded system with chassis grounding protection

*AC/DC support with optional power adapter

iD**o**or R33138 CCC CE FCC c UL us LISTED E190581 I-T/E

Introduction

The TPC-1551T(B) SR Sunlight Readable version thin client terminal with a 15" XGA LCD, low power embedded Intel® Atom™ E3845 1.91GHz Quad-core Processor and 4GB (8GB optional) DDR3L SDRAM provides computing performance in a compact fanless system. To enhance its durability, the TPC-1551T(B) SR is true-flat touch screen designed with IP66 front protection, die-cast Aluminum Alloy front bezel and 5-wire resistive touch suitable for outdoor environments. It supports wide operating temperatures -20~60°C and includes full size mini-PCIe slot to extend the functionality and meet a variety of automation applications needs. Through the Mini-PCIe slot, Advantech iDoor technology (optional) can provide more I/O connectors, Isolated Digital IO, the Fieldbus Protocol, 3G/4G/GPS/GPRS/Wi-Fi Communication and Battery-backup MRAM. High brightness LCD plus optical bonding increase visibility and reduce reflection under direct/indirect sunlight.

Specifications

General

BIOS	AMI UEFI
Certification	BSMI, CCC, CE, FCC Class A, UL
Cooling System	Fanless design
Dimensions (W x H x D)	383.2 x 307.3 x 55.9 mm (15.09 x 12.10 x 2.2 in)
Enclosure	Front bezel: Die-cast Aluminum alloy Back housing: SECC
Mounting	VESA mount, Desktop, wall, panel
OS Support	Microsoft® WES7 (32/64-bit), Windows 7 (32/64-bit), Windows 10 Enterprise LTSB, Android, Advantech Linux
Power Consumption	25W typical, 50W max.
Power Input	24 V_{DC} ± 20%
Watchdog Timer	1 ~ 255 sec (system)
Weight (Net)	4.4kg (9.7lbs)

System Hardware

CPU	Intel® Atom™ E3845 1.91GHz Quad-core Processor
Memory	1 x SODIMM with 4 GB DDR3L SDRAM (supports up to 8 GB)
LAN	2 x Intel® I210; 10/100/1000 BASE-T
Expansion Slots	1 x Full-size mini PCIe (USB+PCIe interface)
Storage	1 x 2.5" SATA SSD, 1 x mSATA
I/O	1 x RS-232 1 x RS-232/422/485 1 x USB 3.0 3 x USB 2.0 1 x iDoor slot

LCD Display

Display Type	XGA TFT LED LCD
Display Size	15"
Max. Resolution	1024 x 768
Max. Colors	16.2 M
Luminance cd/m²	1200
Viewing Angle (H/V°)	160/140
Backlight Life	50,000 hrs
Contrast Ratio	700:1

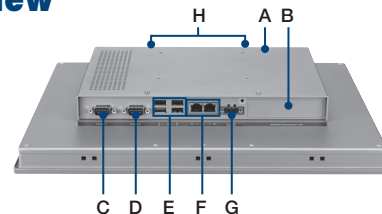### Touchscreen

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)
Storage Temperature	-30 ~ 70°C (-22 ~ 158°F)
Vibration Protection	With SSD: 1 Grms (5 ~ 500 Hz) (operating, random vibration)

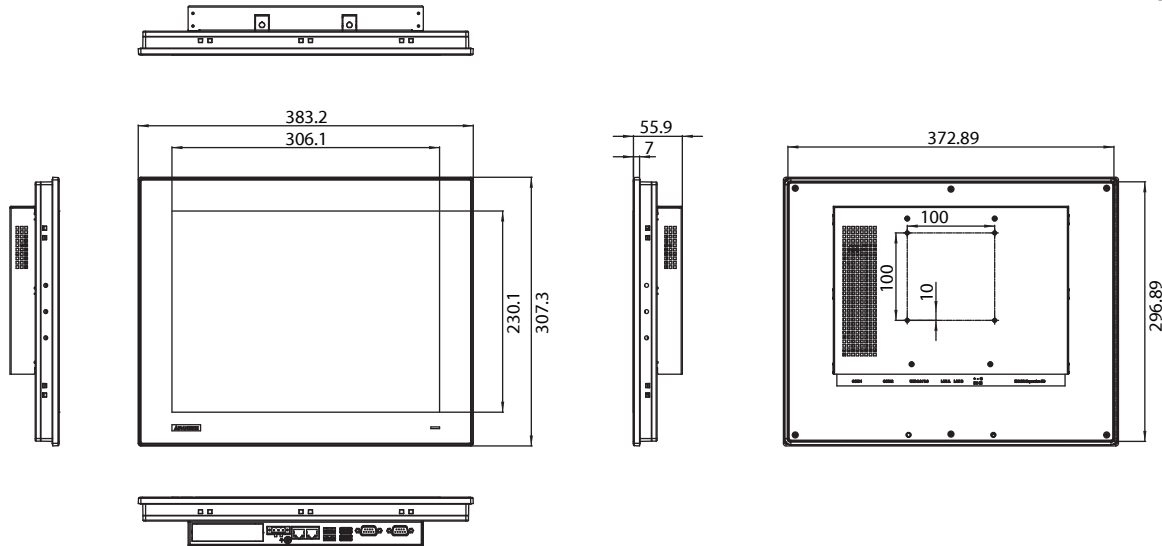## Rear View

A. Default HDD/SSD Bay
B. iDoor slot
C. RS-232
D. RS-232/422/485
E. USB 2.0 & 3.0
F. LAN (10/100/1000)
G. Power Receptor
H. Antenna Opening

ADVANTECH **Industrial Thin-Client Terminals**

All product specifications are subject to change without notice. Last updated: 13-Jan-2021

Dimensions

Unit: mm

TPC-1551T-B Panel Cutout Dimensions: 374.5 x 298.5 mm (14.74 x 11.75 in)

Ordering Information

- **TPC1551TE3BU2001-T**   15" XGA Sunlight Readable Panel PC, Intel® Atom™ E3845, 1.91 GHz Processor, 4GB DDR3L SDRAM

Optional Accessories

- **PWR-247-DE**   60W 24 V_{DC} /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

Embedded OS

- **20703WE7PS0027**   TPC-xx51T(B) WS7P x86 MUI Image V4.19
- **20703WE7PS0028**   TPC-xx51T(B) WS7P x64 MUI Image V4.19
- **20703WX9ES0023**   TPC-xx51T(B) Win10 x64 LTSC v6.05 B015 Entry (2020)
- **20703AI0NS0010**   TPC-xx51T(B) Android v6.0
- **20701LUB1S0005**   TPC-xx51T(B) Advantech Linux Ubuntu 20.04

iDoor Modules

- **PCM-26D2CA-AE**   SJA1000 CANBus, CANOpen, DB9 x 2
- **PCM-26D1DB-MAE**   Hilscher netX100 FieldBus, ProfiBus, DB9 x 1
- **PCM-27D24DI-AE**   Digital I/O, 16 DI / 8 DO, Isolation, DB37 x 1
- **PCM-24D2R4-BE**   OXPCIe-952 UART, Isolated RS-422/485, DB9 x 2
- **PCM-24D2R2-BE**   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-262R2EC-MAE**   Hilscher netX100 FieldBus mPCIe, EtherCAT, RJ45 x 2, Master
- **PCM-27J3AU-AE**   3-Port Audio Stereo, mPCIe, 3.5 mm Jack
- **PCM-29R1TX-AE**   1-Port iLink(TX), Long Distant Display Transmitter, RJ45

Application Software

WebAccess/SCADA	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 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.
WebAccess/HMI	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 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.

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.