TPC-1051WP

10.1" WXGA TFT LED LCD Thin-Client Terminal with Intel® Atom™ Processor



Features

- Industrial-grade 10.1" WXGA TFT LCD with 50K lifetime and LED backlight
- Intel® Atom™ E3827 1.75 GHz dual-core processor with 4 GB DDR3L SDRAM
- 16:9 widescreen display with PCAP multi-touch control
- IP66-rated front panel and panel mount
- Built-in intelligent home key and iKey for intuitive operation
- Front-facing LED indicators to show operating status
- Supports Advantech's iDoor technology for integrating optional accessories
- Chassis grounding protection
- Anti-scratch surface with 7H hardness
- Supports AC/DC input with optional power adapter
- Supports Advantech's SNMP Subagent software
- Supports Advantech's WISE-PaaS/RMM remote management software



Introduction

The TPC-1051WP thin-client terminal is equipped with a 10.1" WXGA TFT LCD, low-power Intel[®] Atom™ E3827 1.75 GHz dual-core processor, and 4 GB DDR3L SDRAM to deliver sufficient computing performance in a compact, fanless system. For enhanced durability, TPC-1051WP features a true-flat touchscreen with IP66-rated front panel, die cast aluminum alloy front bezel, and projected capacitive touch control. Because of the system's compact but robust design, it can be easily deployed into existing infrastructure. Moreover, Advantech's iDoor technology can be integrated via the mini PCle slot in order to provide additional I/O connectors, isolated digital I/O, fieldbus protocols, 3G/GPS/GPRS/Wi-Fi communication, and MRAM to support diverse industrial automation applications.

Specifications

General

BIOS AMI UEFI

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

• Cooling System Fanless design

Dimensions (W x H x D) 283.1 x 202.3 x 61.4 mm (11.15 x 7.96 x 2.42 in)

• **Enclosure** Front bezel: Die cast aluminum alloy

Back housing: SECC

Mounting
 Desktop, Wall, Panel Mount, and VESA mount

(with optional kit)

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

Windows 10 Enterprise LTSB

Power Input 24 V_{DC} ± 20%
 Power Consumption 36 W(Typical)
 Watchdog Timer 1 ~ 255 sec (system)
 Weight (Net) 2.56 kg (5.64 lbs)

System Hardware

CPU Intel® Atom™ E3827 1.75 GHz processor
 Memory 4 GB (8 GB optional) DDR3L 1600 MHz SODIMM SDRAM

LAN 2 x 10/100/1000BASE-TExpansion Slots 1 x Full-size mini PCle

Storage 1 x CFast

1 x 2.5" SATA SSD (optional)

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

1 x USB 3.0 1 x USB 2.0

LCD Display

Display Type
 Display Size
 WXGA TFT LED LCD
 10.1"

Max. Resolution
 Max. Colors
 Luminance cd/m²
 Viewing Angle (H/V°)
 Backlight Life
 Contrast Ratio
 1280 x 800
 262k
 170/170
 25,000 hr
 1300:1

Touchscreen

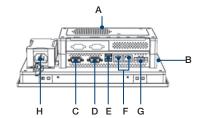
Light Transmission 90% ± 3%
 Resolution 2048 x 2048 dot
 Type Projected capacitive

Environment

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

Ingress Protection
 Operating Temperature
 Storage Temperature
 Vibration Protection
 Front panel: IP66
 -20 ~ 55 ° C (-4 ~ 131 ° F)
 -30 ~ 70 ° C (-22 ~ 158 ° F)
 With HDD: 1 Grms (5 ~ 500 Hz), (Operating, random vibration)

Rear View



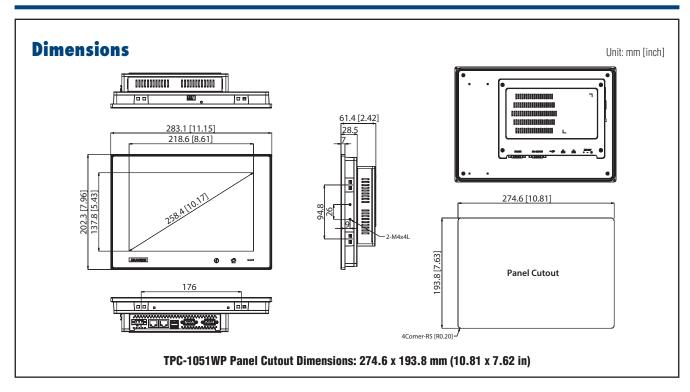
A. External HDD/iDoor kit (TPC-1251T-EHKE) (optional)

B. CFast C. RS-232

D. RS-232/422/485 E. USB 3.0 & 2.0

F. LAN (10/100/1000) G. Power receptor

H. Power adapter and bracket (optional)



Ordering Information

• TPC-1051WP-E3AE 10.1" Multi-Touch Panel PC, Intel Atom E3827, 4GB DDR3L pre-installed

Optional Accessories

• **PWR-247-DE** 100-240V 60W 24V 2.5A Power Supply

(w/o adapter mounting)

1702002600 Power Cable US Plug 1.8 M
 1702002605 Power Cable EU Plug 1.8 M
 1702031801 Power Cable UK Plug 1.8 M

170000596-11 Power Cable China/Australia Plug 1.8 M
 TPC-1000H-WMKE TPC series wallmount kit from 10"~17"

Embedded OS

2070013484 TPC-xx51WP WS7P x64 MUI V4.13
 2070014387 TPC-xx51WP WS7P X86 MUI. V4.14
 2070014871 TPC-xx51WP Win10 2016 LTSB V6.01
 2070013911 TPC-1551WP WEC7 X64 MUI V4.00

S/W Bundle Offering

■ WA-HT1051W-E15H1AE TPC-1051WP-E3AE, HMI Runtime 1500 tags, 32G CFast. WES7P

iDoor Modules (TPC-1251T-EHKE is required for 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-AE** OXPCIe-952 UART, Isolated RS-422/485, DB9 x 2

■ PCM-24D2R2-AE OXPCIe-952 UART, Isolated RS-232, DB9 x 2

■ PCM-24R2GL-AE 2 Port Giga LAN Intel i350 PCle mini card

■ **PCM-24R1TP-AE** Intel 82574L, GbE, IEEE 1588 PTP, RJ45 x 1

PCM-24S2WF-AE
 802.11 a/b/g/n 2T2R w/ BT4.0, Atheros AR9462

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 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

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.