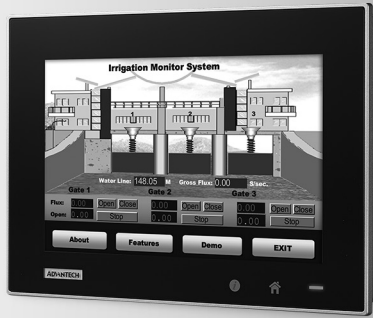# TPC-1051WP

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

NEW

Features

- Industrial 10.1 TFT LCD with 25K Lifetime LED Backlight
- Intel® Atom™ E3827 1.75 GHz Processor with 4GB DDR3L SDRAM
- 16:9 Wide Screen with PCT Multi-Touch
- IP66 Approved Front Protection & Panel Mounting
- Built-in Intelligent Home key and i Key for an intuitive user interface
- Front LED Indicator to Show Operating Status
- Supports iDoor with optional accessory kit
- Chassis Grounding Protection
- Anti-scratch surface: 7H hardness
- AC/DC support (option by Power adapter)
- Supports Advantech SNMP Subagent
- Supports Advantech SusiAccess Remote Device Management Software

SUSIAccess iKey iDoor R33138 CCC CE FCC c UL us LISTED E180881 I.T.E.

Introduction

The TPC-1051WP is a thin client terminal with a 10.1" WXGA LCD, low power embedded Intel® Atom™ E3827 1.75 GHz Processor and 4GB DDR3L SDRAM provides adequate computing performance in a compact fanless system. The TPC-1051WP is a true-flat touch screen design with IP66 front protection, die-cast Aluminate Alloy front bezel and Projected capacitive touch. Furthermore, the TPC-1051WP is easy for your to embed into your equipment because of its small yet robust design. In addition, through the Mini-PCIe slot, Advantech iDoor technology (optional) can provide more I/O connectors, Isolated Digital I/O, the Fieldbus Protocol, 3G/GPS/GPRS/Wi-Fi Communication and Battery-backup MRAM to fulfill different kinds of the industrial automation application.

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)
- **Enclosure** — Front bezel: Die-cast Aluminum alloy / Back housing: SECC
- **Mounting** — Desktop, Wall, Panel Mount, and VESA mount (with optional kit)
- **OS Support** — Microsoft® Windows WES7 32bit/64bit / Windows 7 32bit/64bit / Win EMB 8.1 Industry Pro
- **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** — 4GB (8GB optional) DDR3L 1600MHz SO-DIMM SDRAM
- **LAN** — 10/100/1000 Base-T x 2
- **Expansion Slots** — Full-size Mini PCI-E
- **Storage** — CFast slot x 1 / 2.5" SATA SSD slot x 1 (optional)
- **I/O** — RS-232 x 1, RS-232/422/485 x 1 / USB 3.0 x 1 / USB 2.0 x 1

LCD Display

- **Display Type** — XGA TFT LED LCD
- **Display Size** — 10.1"
- **Max. Resolution** — 1280 x 800
- **Max. Colors** — 262k
- **Luminance cd/m²** — 300
- **Viewing Angle (H/V°)** — 170/170
- **Backlight Life** — 25,000 hrs
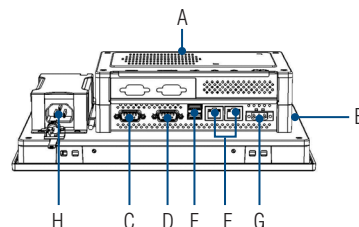- **Contrast Ratio** — 1300:1

Touchscreen

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

Environment

- **Humidity** — 10 ~ 95% RH @ 40°C, non-condensing
- **Ingress Protection** — Front panel: IP66
- **Operating Temperature** — -20 ~ 55°C (-4 ~ 131°F)
- **Storage Temperature** — -30 ~ 70°C (-22 ~ 158°F)
- **Vibration Protection** — With HDD: 1 Grms (5 ~ 500 Hz), (Operating, random vibration)
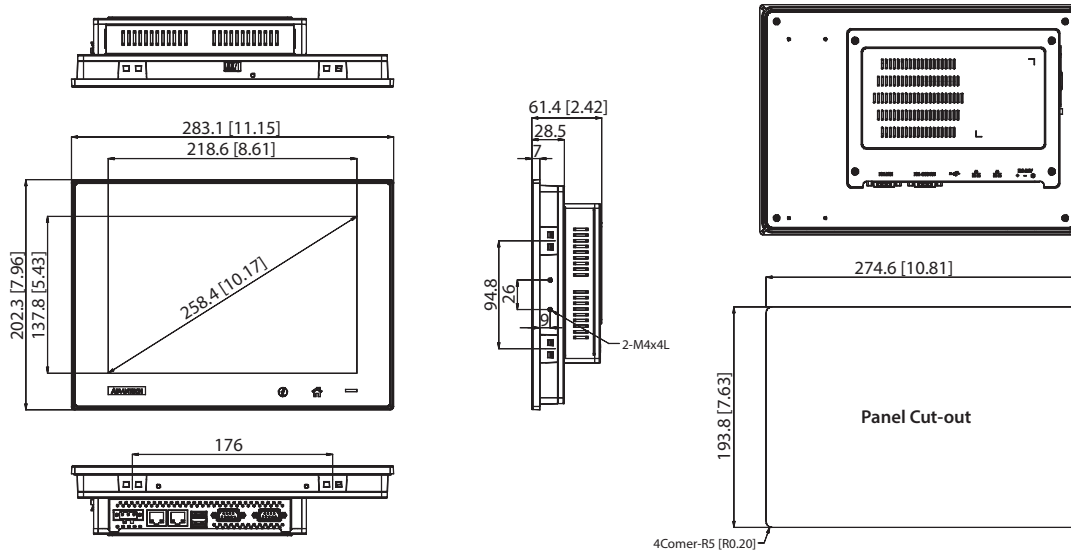
Rear View

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 Inlet
H. Power adapter and Bracket (option)

Dimensions

Unit: mm [inch]

283.1 [11.15]
218.6 [8.61]
202.3 [7.96]
137.8 [5.43]
258.4 [10.17]
176

61.4 [2.42]
28.5
7
94.8
26
9
2-M4x4L

274.6 [10.81]
193.8 [7.63]
Panel Cut-out
4Comer-R5 [R0.20]

TPC-1051WP Panel Cut-out Dimensions: 274.6 x 193.8 mm

Ordering Information

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

Accessories

- **TPC-1000H-ADKE** — 63W DC 24V/2.62A Power supply & bracket for TPC-xx51WP series
- **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

Automation S/W & Embedded O/S

- **2070013484** — TPC-xx51WP WS7P x64 MUI Image v4.13
- **2070013485** — TPC-xx51WP 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-24D2R4-AE** — 2-Port Isolated RS-422/485 mPCIe, DB9
- **PCM-26D2CA-AE** — 2-Port Isolated CANBus mPCIe, CANOpen, DB9
- **PCM-27D24DI-AE** — 24-Channel Isolated Digital I/O w/ counter mPCIe, DB37
- **PCM-24R1TP-AE** — 1-Port Gigabit Ethernet, Intel® 82574L, mPCIe, RJ45
- **PCM-24S2WF-AE** — WiFi 802.11 a/b/g/n 2T2R w/ Bluetooth4.0, Half-size mPCIe, 2-port SMA
- **PCM-24S23G-AE** — Wide-Temp 3.75G HSPA and GPS, 2-in-1, Full-size mPCIe w/ Redundant SIM Card holder, 2-port SMA

Application Software

SUSIAccess	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.
PANELEXPRESS 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 Designer	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.
WebAccess/NMS	Visualizing device and platform network connectivity conditions and offering easier firmware and configuration solutions to ensure stable network connections.