

TPC-1582H

15" XGA TFT LED LCD 4th. Gen. Intel® Core™ i3 Touch Panel Computer



Features

- Industrial 15" XGA TFT LCD with 50K Lifetime LED Backlight
- Intel 4th Generation Core i3 1.7GHz with 4GB DDR3L SDRAM
- Compact Fanless Embedded System with AI Alloy Front Bezel
- IP65 Approved Front Protection & Panel Mounting
- More Durable 5-wire Resistive Touch Screen
- PCIe and Mini PCIe Expansion Support
- Diverse system IO and Isolated Digital IO by iDoor Technology
- Supports Fieldbus Protocol by iDoor Technology
- 3G/GPS/GPRS/WiFi Communication by iDoor Technology
- Supports MRAM by iDoor Technology
- Chassis Grounding Protection
- HDMI and Audio Multimedia Support
- Support Advantech SusiAccess Remote Device Management Software

Introduction

The TPC-1582H touch panel computer with a 15" XGA LCD, low power embedded Intel 4th Generation Core i3 1.7GHz processor and 4GB DDR3L SDRAM provides the high computing performance in a compact fanless system. To enhance its durability, the TPC-1582H is designed with IP65 front protection, die-cast AI Alloy front bezel and 5-wire resistive touch. It also includes PCIe slot and Mini-pcie slots to extend the functionality and meet a variety of automation applications needs. Through the Mini-PCIe slot, Advantech iDoor technology can provide more I/O connectors, Isolated Digital IO, the Fieldbus Protocol, 3G/GPS/GPRS/WiFi Communication and MRAM. A 2nd monitor and speaker can be attached via the integrated HDMI and Audio port.

The pre-loaded SusiAccess is a smart, unique and ready-to-use remote device management software for you to centralize monitoring and managing of remote embedded devices in real-time. You can focus more on your own applications and let SusiAccess do the rest - configure systems, monitor device health, and recover from any system failures. It's cloud-based and provides on-demand software services so you can easily download and upgrade applications when you need.

Specifications

General

- **BIOS** AMI UEFI
- **Certification** BSMI, CCC, CE, FCC Class A, UL
- **Cooling System** Fanless design
- **Dimensions (W x H x D)** 383 x 307 x 78.5 mm (15.08" x 12.09" x 3.09")
- **Enclosure** Front bezel: Die-cast Aluminum alloy
Back housing: PC/ABS Resin
- **Mounting** Desktop, Wall or Panel Mount
- **OS Support** Microsoft® Windows WES7 32bit/64bit /WES8 64bit / Windows 7 32bit/64bit / Windows 8 64bit Linux Kernel 3.x
- **Power Consumption** 18W Typical, 60W Max. (Without Add-on card)
- **Power Input** 24V_{DC} ± 20%
- **Watchdog Timer** 1 ~ 255 sec (system)
- **Weight (Net)** 5.5 kg (12.13 lbs)

System Hardware

- **CPU** Intel 4th Generation Core i3-4010U 1.7GHz
- **Chipset** Lynx Point-LP
- **Memory** 4GB DDR3L 1600MHz SO-DIMM SDRAM
- **LAN** 10/100/1000 Base-T x 2 (one port supports iAMT)
- **Expansion Slots** Half-size PCI-E and Full-size Mini PCI-E
- **Storage** CFast slot x 1
2.5" SATA SSD slot x 1
mSATA slot x 1 (via Mini PCIe)
- **I/O** RS-232 x 1, RS-232/422/485 x 1
USB 3.0 x 2, HDMI 1.4 x 1
Audio Line out x 1, USB 2.0 x 1 (optional)
Audio MIC x 1 (optional)

LCD Display

- **Display Type** XGA TFT LED LCD
- **Display Size** 15"

- **Max. Resolution** 1024 x 768
- **Max. Colors** 16.2 M
- **Luminance cd/m²** 400
- **Viewing Angle (H/V°)** 160/140
- **Backlight Life** 50,000 hrs
- **Contrast Ratio** 700:1

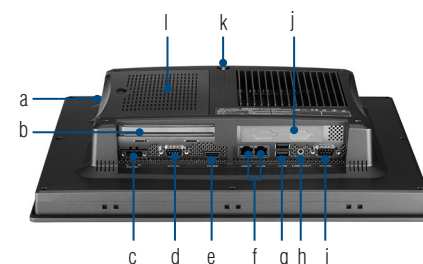
Touchscreen

- **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: IP65
- **Operating Temperature** 0 ~ 55°C (32 ~ 131°F)
- **Storage Temperature** -20 ~ 60°C (-4 ~ 140°F)
- **Vibration Protection** With HDD: 1 Grms (5 ~ 500 Hz) (Operating, random vibration)

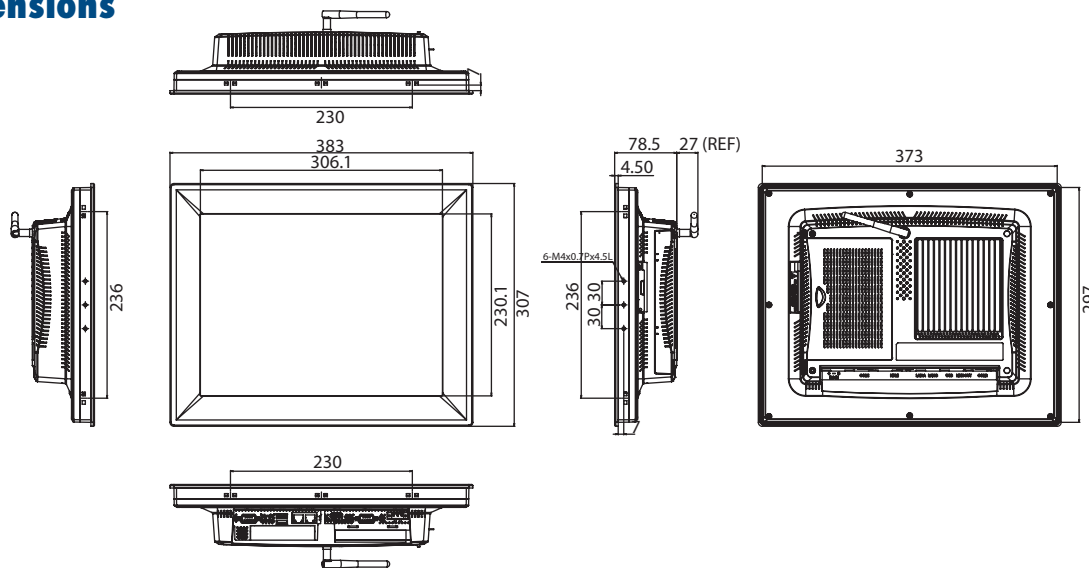
Rear View



- a. CFast
- b. PCI-E Slot
- c. 24V_{DC} Power
- d. COM (RS-232)
- e. HDMI
- f. LAN
- g. USB3.0
- h. Audio Line Out
- i. COM (RS-232/422/485)
- j. iDoor
- k. SMA Connector for Antenna
- l. 2.5" SATA SSD Slot and Mini-PCIe Slot

Dimensions

Unit: mm



Panel Cut-out Dimensions: 374.5 x 298.5 mm (14.74" x 11.75")

Ordering Information

- TPC-1582H-433AE 15" XGA Panel PC, Intel i3-4010U, 4GB, iDoor, PCIe

Accessories

- PWR-248-AE 150W DC 24V/6.25A Output Power Supply
- 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-1000H-WMKE TPC VESA Mounting Kit from 10" to 17" TPC
- TPC-1000H-SMKE TPC Stand kit from 10" to 17" TPC
- EWM-W151H01E 802.11bgn RTL8188EE 1T1R, Half-size Mini-PCIe (also need 9656EWMG00E)
- 9656EWMG00E Half-size miniPCIe to Full-size miniPCIe bracket set
- 1750000318 EMI Antenna 2DBI 2.4GHz SMA CONN for ARK-3384
- 1750003222 802.11b/g 5dBi Dipole Antenna
- 1750003418 Wireless Antenna AN2400-5901RS R/P SMA.M9dB

Automation S/W & Embedded O/S

- 2070013102 TPC-xx82 WS7P x64 MUI Image v4.12 B005
- 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

- PCM-24D2R4-AE 2-Port Isolated RS-422/485 mPCIe, DB9
- PCM-27D24DI-AE 24-Channel Isolated Digital I/O w/ counter mPCIe, DB37
- PCM-26D2CA-AE 2-Port Isolated CANBus mPCIe, CANOpen, DB9
- 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-26D1DB-MAE 1-Port Hilscher netX100 FieldBus mPCIe, PROFIBUS, DB9, Master
- PCM-26R2PN-MAE 2-Port Hilscher netX100 FieldBus mPCIe, PROFINET, RJ45, Master
- PCM-26R2EC-MAE 2-Port Hilscher netX100 FieldBus mPCIe, EtherCAT, RJ45, Master
- PCM-26R2EI-MAE 2-Port Hilscher netX100 FieldBus mPCIe, EtherNet/IP, RJ45, Master
- PCM-26R2S3-MAE 2-Port Hilscher netX100 FieldBus mPCIe, Sercos III, RJ45, Master

Application Software

	<p>Version: V2.1 or above</p> <p>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.</p>
	<p>Version: V7.1 or above</p> <p>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.</p>
	<p>Version: V2.0.3.8 or above</p> <p>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.</p>
	<p>Version: V2.0.3.8 or above</p> <p>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.</p>