

# TPC-1581WP

## 15.6" WXGA TFT LED LCD 4th. Gen. Intel® Core™ i3 Multi-Touch Panel Computer

NEW



### Features

- Industrial 15.6 HD TFT LCD with 50K Lifetime LED Backlight
- Intel 4th Generation Core i3-4010U 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 Intuitive UI
- Front LED Indicator to Show Operating Status
- 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
- Anti-scratch surface: 7H hardness



### Introduction

With growing up in Multi-Touch technology, the TPC-1581WP features Intel 4th Generation Core i3-4010U 1.7GHz processor with 4GB DDR3L SDRAM provides the high computing performance. To enhance reliability and durability, built-in 7H hardness anti-scratch surface on high resolution 15.6" HD display with Multi-Touch in 16:9 format. 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.

### Specifications

#### General

- **BIOS** AMI UEFI
- **Certification** BSMI, CCC, CE, FCC Class A, UL
- **Cooling System** Fanless design
- **Dimensions (W x H x D)** 419.7 x 269 x 56.7 mm (16.52" x 10.59" x 2.23")
- **Enclosure** Front bezel: Die-cast Aluminum alloy  
Back housing: PC/ABS Resin
- **Mounting** 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<sub>DC</sub> ± 20%
- **Watchdog Timer** 1 ~ 255 sec (system)
- **Weight (Net)** 6 kg (13.22 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
- **Expansion Slots** Full-size Mini PCI-E
- **Storage** CFast slot x 1  
2.5" SATA SSD slot x 1  
mSATA slot x 1 (via Mini PCIe slot, can't be used simultaneously with iDoor)
- **I/O** RS-232/422/485 x 1, RS-232 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** WXGA TFT LED LCD
- **Display Size** 15.6
- **Max. Resolution** 1366 x 768
- **Max. Colors** 16.7M
- **Luminance cd/m<sup>2</sup>** 300
- **Viewing Angle (H/V°)** 170/160
- **Backlight Life** 50,000 hrs
- **Contrast Ratio** 500:1

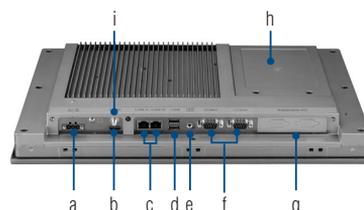
#### Touchscreen

- **Light Transmission** ≥88%
- **Resolution** 2048 x 2048 dot
- **Type** Projected capacitive

#### Environment

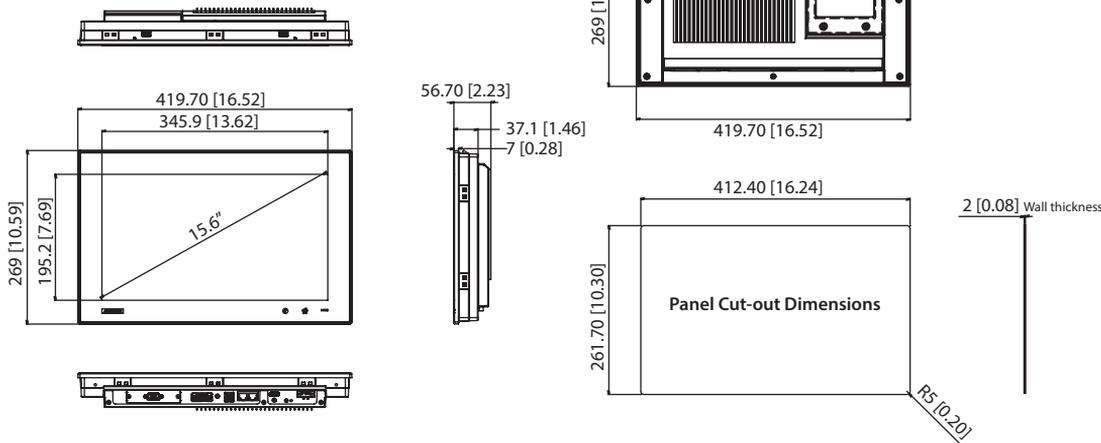
- **Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- **Ingress Protection** Front panel: IP66
- **Operating Temperature** 0 ~ 55°C (32 ~ 131°F)
- **Storage Temperature** -20 ~ 60°C (-4 ~ 140°F)
- **Vibration Protection** With HDD: 1 Grms (5 ~ 500 Hz) (Operating, random vibration)

### Rear View



- a. 24V<sub>DC</sub> Power
- b. HDMI
- c. GbE
- d. USB3.0
- e. Audio Line out
- f. COM Port RS-232/422/485, RS-232
- g. Expansion I/O (iDoor)
- h. 2.5" SATA SSD, CFast and Mini PCIe Slot
- i. SMA Connector for Antenna

## Dimensions



## Ordering Information

- TPC-1581WP-433AE 15.6" HD Multi-Touch Panel PC, Intel i3-4010U, 4GB, iDoor

## Accessories

- PWR-248-AE 150W DC 24V/6.25A Output Power Supply (High power consumption expansion card required, e.g. PoE)
- 1702002600 Power Cable US Plug 1.8 M
- 1702002605 Power cable EU Plug 1.8M
- 1702031801 Power cable UK Plug 1.8M
- 1700000596 Power Cable China/Australia Plug 1.8 M
- EWM-W151H01E 802.11bgn RTL8188EE 1T1R, Half-size Mini-PCle (also need 9656EWMG00E)
- 9656EWMG00E Half-size miniPCle to Full-size miniPCle 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

- 2070013487 TPC-xx81WP WS7P x64 MUI Image v4.12 B003
- 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 mPCle, DB9
- PCM-27D24DI-AE 24-Channel Isolated Digital I/O w/ counter mPCle, DB37
- PCM-26D2CA-AE 2-Port Isolated CANBus mPCle, CANOpen, DB9
- PCM-24R1TP-AE 1-Port Gigabit Ethernet, Intel® 82574L, mPCle, RJ45
- PCM-24S2WF-AE WiFi 802.11 a/b/g/n 2T2R w/ Bluetooth4.0, Half-size mPCle, 2-port SMA
- PCM-26D1DB-MAE 1-Port Hilscher netX100 FieldBus mPCle, PROFIBUS, DB9, Master
- PCM-26R2PN-MAE 2-Port Hilscher netX100 FieldBus mPCle, PROFINET, RJ45, Master
- PCM-26R2EC-MAE 2-Port Hilscher netX100 FieldBus mPCle, EtherCAT, RJ45, Master
- PCM-26R2EI-MAE 2-Port Hilscher netX100 FieldBus mPCle, EtherNet/IP, RJ45, Master
- PCM-26R2S3-MAE 2-Port Hilscher netX100 FieldBus mPCle, 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 &amp; 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>