# **TPC-1581WP**

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



#### **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

# SUSIÂCCESS ÍK\*Y ÍD\*\* C E FCC CONTRODUCTION

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-PCle 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 UEF

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" 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
 Watchdog Timer
 Weight (Net)
 24V<sub>DC</sub> ± 20%
 1 ~ 255 sec (system)
 6 kg (13.22 lbs)

#### **System Hardware**

I/0

■ **CPU** Intel 4<sup>th</sup> 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 12.5" SATA SSD slot x 1

mSATA slot x 1 (via Mini PCle slot, can't be used

simultaneously with iDoor) 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/m² 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

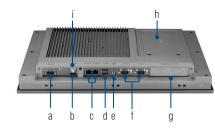
#### **Environment**

• **Humidity**  $10 \sim 95\%$  RH @  $40^{\circ}$ C, non-condensing

Ingress Protection
Operating Temperature
Storage Temperature
Vibration Protection

Front panel: IP66
0 ~ 55°C (32 ~ 131°F)
-20 ~ 60°C (-4 ~ 140°F)
With HDD: 1 Grms (5 ~ 500 Hz)
(Operating, random vibration)

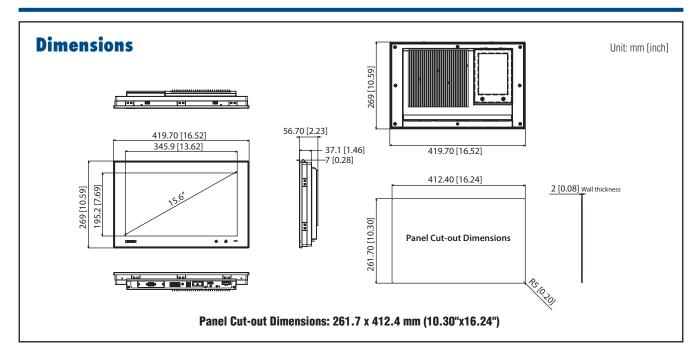
#### **Rear View**



- 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 PCle Slot
- i. SMA Connector for Antenna

ADVANTECH

**Automation Panels** 



## **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 802.11b/g 5dBi Dipole Antenna 1750003222

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-AF 2-Port Isolated RS-422/485 mPCle, DB9 PCM-27D24DI-AE 24-Channel Isolated Digital I/O w/ counter mPCle, DB37

2-Port Isolated CANBus mPCle, CANOpen, DB9 1-Port Gigabit Ethernet, Intel® 82574L, mPCle, RJ45 PCM-26D2CA-AE PCM-24R1TP-AE WiFi 802.11 a/b/g/n 2T2R w/ Bluetooth4.0, Half-size mPCle, PCM-24S2WF-AE 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,

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**

Approximation bottom of	
susiÂccess	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.
PANEL EXPRESS Designed To: 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	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.