TPC-1881WP
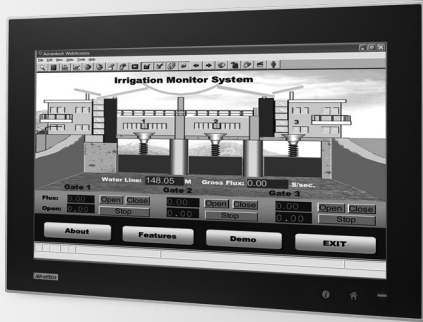## 18.5 HD TFT LED LCD Intel® 4ᵗʰ Generation Core i3/ i7 Multi-Touch Panel Computer

NEW

Features

- Industrial 18.5 HD TFT LCD with 50K Lifetime LED Backlight
- Intel 4ᵗʰ Generation Core i3-4010U/ i7-4650U with 4GB/8GB 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 Battery-backup MRAM by iDoor Technology
- Chassis Grounding Protection
- HDMI and Audio Multimedia Support
- Anti-scratch surface: 7H hardness

iDoor R33138 CCC CE FCC c(UL)us LISTED E180881 I.T.E.

Introduction

With growing up in Multi-Touch technology, the TPC-1881WP features Intel 4ᵗʰ Generation Core i3-4010U/ i7-4650U 1.7GHz processor with 4GB/8GB DDR3L SDRAM provides the high computing performance. To enhance reliability and durability, built-in 7H hardness Anti-scrath surface on high resolution 18.5" 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 Battery-backup 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)** — 488 x 309 x 56.7 mm (19.21" x 12.17" 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** — 28W Typical, 60W Max. (Without Add-on card)
- **Power Input** — 24V$_{DC}$ +/- 20%
- **Watchdog Timer** — 1 ~ 255 sec (system)
- **Weight (Net)** — 7kg (15.44 lbs)

System Hardware

- **CPU** — Intel 4ᵗʰ Generation Core i7-4650U 1.7GHz
  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** — Full-size Mini PCI-E
- **Storage** — CFast slot x 1
  2.5" SATA SSD slot x 1
- **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** — HD TFT LED LCD
- **Display Size** — 18.5
- **Max. Resolution** — 1366 x 768
- **Max. Colors** — 16.7M
- **Luminance cd/m²** — 300
- **Viewing Angle (H/V°)** — 170/160
- **Backlight Life** — 50,000 hrs
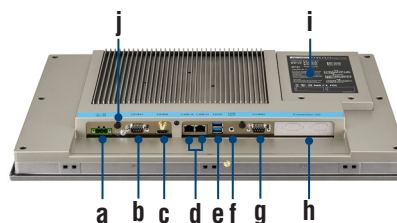- **Contrast Ratio** — 500:1

Touchscreen

- **Light Transmission** — ≥88%
- **Resolution** — 4096 x 4096 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)
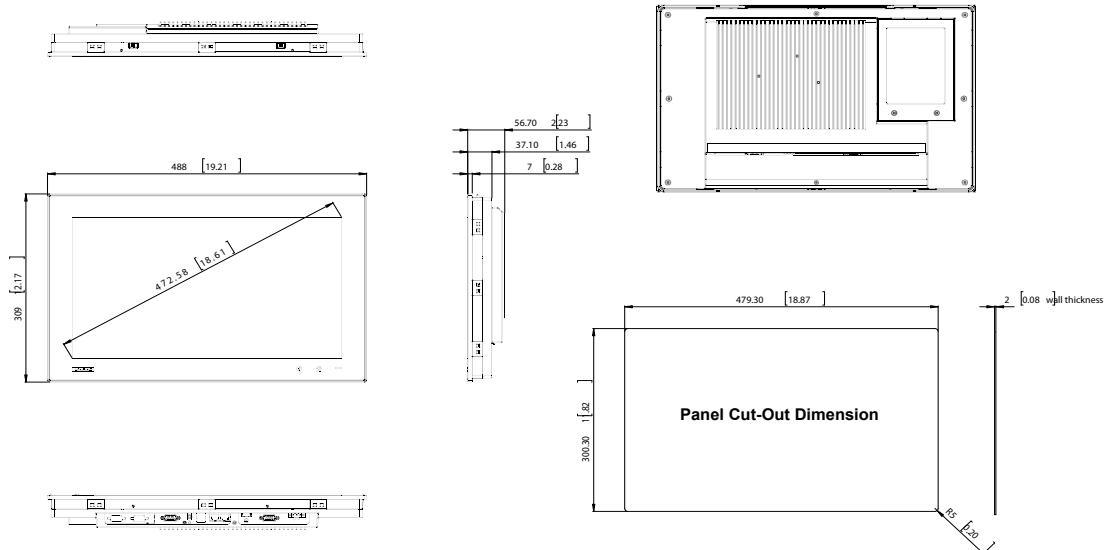 (Operating, random vibration)

Rear View

a. 24V$_{DC}$ Power
b. COM Port RS-232
c. HDMI
d. GbE
e. USB 3.0
f. Audio Line out
g. COM Port RS-232/422/485
h. Expansion I/O (iDoor)
i. 2.5" SATA SSD, CFast and Mini PCIe Slot
j. SMA Connector for Antenna

Dimensions

Unit: mm [inch]

Panel Cut-out Dimensions: 479.3 x 300.3 (18.87" x 11.82")

Ordering Information

- **TPC-1881WP-433AE**   18.5" HD Multi-Touch Panel PC, Intel i3-4010U, 4GB, iDoor
- **TPC-1881WP-473AE**   18.5" HD Multi-Touch Panel PC, Intel i7-4650U, 4GB, iDoor
- **WA-TPC1881WP**   TPC-1881WP-433AE with WebAccess sofware

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 1.8M
- **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-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 Sofware

- **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-2300MR-AE**   MR4A16B, 2MByte
- **PCM-26D1PB-AE**   Hilscher netX100 FieldBus, ProfiBus, DB9 x 1
- **PCM-26D2CA-AE**   SJA1000 CANBus, CANOpen, DB9 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-24D4R4-AE**   OXPCIe-954 UART, Non-Isolated RS-422/485, DB37 x 1
- **PCM-24D4R2-AE**   OXPCIe-954, UART, Non-Isolated RS-232, DB37 x 1
- **PCM-27D24DI-AE**   Digital I/O, 16DI / 8DO, DB37 x 1

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.