TPC-318WH

18.5" WXGA TFT LED LCD Touch Panel Computer with 8th Gen. Intel® Core™ i5 Processor, built-in 8G DDR4 RAM, 240G SSD and UL Class 1 Division 2

Features

- Industrial-grade 18.5" WXGA TFT LED LCD with 50K lifetime and LED backlight
- 8th Gen. Intel® Core™ i5-8365UE quad-core processor
- Built-in 8GB or DDR4 Memory
- Compact, fanless embedded system with aluminum alloy front bezel and chassis grounding protection
- True-flat touchscreen with PCAP touch control and IP66-rated front panel
- Diverse system I/O
- Support TPM2.0 hardware security

Introduction

TPC-318WH touch panel computer is a C1D2 certification model equipped with 18.5" WXGA TFT LED LCD, low-power 8th Gen. Intel® Core™ i5-8365UE quad-core processor, and built-in 8 GB DDR4 SO-DIMM delivering high performance yet compact and fanless computing system. To provide enhanced durability and satisfy diverse applications of industrial automation, TPC-318WH features IP66-rated front panel protecting against dust and water ingress, and extra expansion M.2 M Key, B Key slots supporting NVMe, SATA or WiFi application. Moreover, TPC-318WH has been C1D2 certified for the application in hazardous environments.

Specifications

General

BIOS	AMI UEFI
Certification	CCC, CE, FCC Class A
Cooling System	Fanless design
Dimensions (W x H x D)	477.72 x 298.72 x 70 mm (18.81 x 13.52 x 2.68 in)
Enclosure	Front bezel: Die cast aluminum alloy Back housing: Die cast aluminum alloy
Mounting	Panel Mount
OS Support	Windows 11
Security	TPM 2.0 (built-in)
Power Consumption	45.48W (Typical)
Power Input	24 V_{DC} ± 20%
Watchdog Timer	15-255 sec (system)
Weight (Net)	6.3kg (13.89lbs)

System Hardware

CPU	8th Gen. Intel® Core™ i5-8365UE 1.60 GHz Quad-core processor
Memory	Built-in 8GB, Dual channel DDR4 SO-DIMM (Support up to 16GB under Explosion-Proof regulation; Supports up to 32G if Explosion-Proof certification isn't required.)
Storage	1 x 2.5" SSD 240GB
LAN	2 x 10/100/1000BASE-T
Storage Slot	1 x M.2 M key 2280 (SATA or NVMe PCIe x4) 1 x M.2 B key 2242 (SATA / PCIe) 1 x 2.5" SSD/ HDD (SATA, Max. 7mm)
I/O	2 x RS-232/422/485 1 x USB 2.0 4 x USB 3.2 1 x Displayport 1 x Audio line out/ mic in

LCD Display

Display Type	WXGA TFT LED LCD
Display Size	18.5"
Max. Resoltuion	1366 x 768
Max Colour	16.7M
Luminance cd/m²	450 cd/m²
Viewing Angle (H/V°)	170°/160°
Backlight Life	50,000 hrs
Contrast Ratio	1000:1

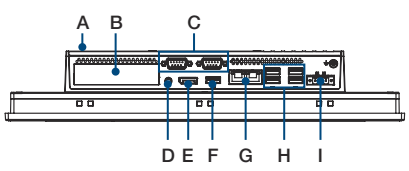
Touchscreen

Lifespan	36 million touches at a single point
Light Transmission	Above 75%
Resolution	Linearity
Type	PCAP touch screen

Environment

Humidity	95% RH @ 40°C, non-condensing
Ingress Protection	IP66-rated front panel
Operating Temperature	-10~55°C (14~131°F) (w/o air flow)
Storage Temperature	-20~70°C (-4~158°F)
Vibration Protection	With SSD: 1 Grms (5 ~ 500 Hz) (Operating, random vibration)

Rear View



A. HDD/SSD Bay
B. iDoor Slot (Not Expandable)
C. RS-232/422/485
D. Audio line out/ mic in
E. Display Port
F. USB 2.0
G. LAN
H. USB 3.2
I. Power Receptor

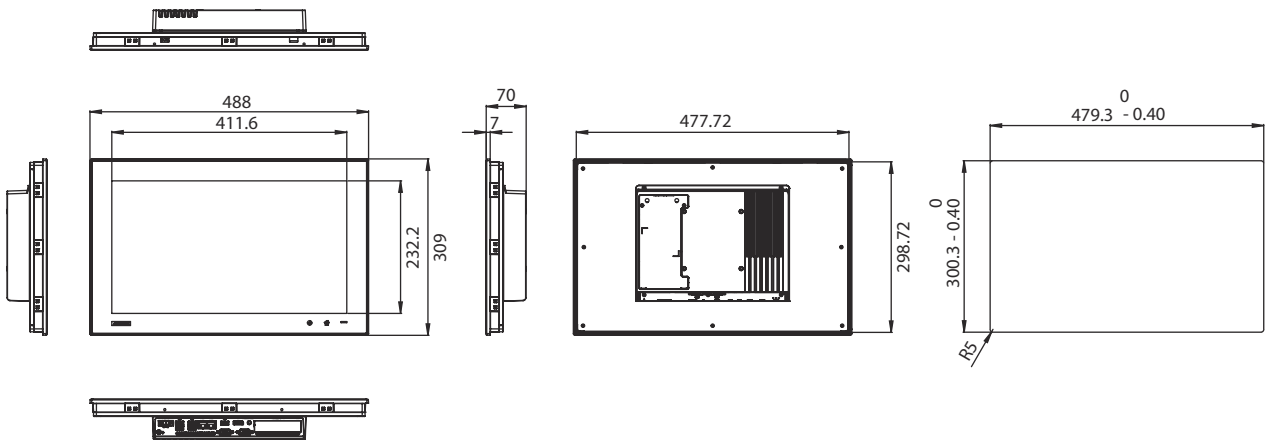
Local CTOS / BTO or components change after shipment aren't allowed for Explosion-Proof product.

All product specifications are subject to change without notice.

Last updated: 25-Jul-2025

Dimensions

Unit: mm



TPC-318WH Panel Cutout Dimensions: 479.3 x 300.3 mm (18.87 x 11.82 in)

Ordering Information

- **TPC-318WH-P853A** 18.5" WXGA Panel PC, C1D2 certification, Intel® Core™ i5 8365UE 1.6GHz Quad-core processor, 8G DDR4 RAM, 240G SSD

Optional Accessories

- **96PSA-A120W24T2-4** 120W 24V_{DC} power supply
- **1702002600** Power cable (US) 1.8 M
- **1702002605** Power cable (EU) 1.8 M
- **1702031801** Power cable (UK) 1.8 M
- **1700000596-11** Power cable (China/Australia) 1.8 M

Embedded OS

- **20701WLH1S0005** Img W11LTSC v7.01 B010 TPC-3xx(W)(H)-x8xxx H
- **20701WLV1S0005** Img W11LTSC v7.01 B010 TPC-3xx(W)(H)-x8xxx V

Packing List

Item	Part No.	Depiction	Qty
Grounding cable	1703011001-11	A Cable G-TEM 4.3 100CM C=GR/Y	1
Plug-In Block	1652007930-01	Plug-In Block 1x3P/5.08mm/PA66/F/VA	1
Warranty	2190000902	CARDBOARD-WARRANTY REV. A2	1
Clamp	1960018986T000	Clamper-bezel M5 for TPC-1770 A1	12
Clamp Screw	1935052000	Screw M5x20L R/S D=9 H=3 (2+) ST Ni	12

Component List

Item	Part Number	Description	Note
Memory	AQD-SD4U8GN32-SE	8GB DDR4 SODIMM-3200 1GbX8 0~85C	Built-In
Storage	SQF-CM8V4-240G-ECE	SQF M.2 2280 920 240G 3D TLC BiCS3 (-40~85°C)	Optional
	SQF-S25V4-240GDSCE	SQF 2.5" SSD 840-D 240G 3D BiCS5 (-40~85°C)	Built-In
	SQF-S25V4-480GDSCE	SQF 2.5" SSD 840-D 480G 3D BiCS5 (-40~85°C)	Optional
	SQF-S25V4-960GDSCE	SQF 2.5" SSD 840-D 960G 3D BiCS5 (-40~85°C)	Optional
WI-FI	EWM-W192M201E	Intel Wireless-AC 9260, 2230, 2x2 AC+BT, Non-vPro	Optional
	EWM-W192M202E	Intel Wireless-AC9260, 2230, 2x2AC+BT, vPro	Optional
	EWM-W192M205E	Intel AC9260 M.2 2230 E-key i-temp module	Optional

Please note: If some optional modules are offered with the system, additional Like C1D2 may be required in certain regions/countries.
Please contact Advantech for certificate compliance.