SPC-618WE

18.5" FHD TFT LED LCD Touch Panel Computer with Intel® Raptor Lake-U Platform with IECEx/ATEX and Class I Division II Explosion-Proof certification

Features

- Industrial-grade 18.5" FHD TFT LCD with 50K lifetime and LED backlight
- 13th Gen. Intel® Core™ i7-1365URE deca-core processor
- Built in single DDR5 4800 RAM with 32GB capacity
- Built in Explosion-Proof certified SSD
- Compact, fanless embedded system with aluminum alloy front bezel and chassis grounding protection
- Specialized enhanced impact proof touchscreen with PCAP touch control and IP66-rated front panel
- Support TPM2.0 hardware security
- IECEx/ATEX explosion proof certification for Zone 2/22
- Class I Division II explosion proof certification

Introduction

Advantech's SPC-618WE Explosion-Protected Touch panel computer, is powered by Intel Raptor Lake-U Intel Core processors. With its fan-less design. SPC-618WE delivers high performance that not simply meets customer demands for a daily-operation control panel, but a genuine Industry 4.0-era-tailored Industrial PC that features bountiful I/Os including two USB 3.2 ports, one USB Type-C port, expansions with explosion proof certified Solid State Drive and WiFi module that support for ultra speed data transmission. The system was IP66 and IECEx/ATEX/Class I Division Explosion-Protected certified, therefore is suitable for hazardous environment.

Specifications

General

BIOS	AMI UEFI
Certification	BSMI, CCC, CE, FCC Class A IECEx/ATEX Zone 2/22 explosion proof certification Class I Division II explosion proof certification
Cooling System	Fanless design
Dimensions (W x H x D)	479.3 x 300.3 x 80 mm
Enclosure	Front bezel: Die cast aluminum alloy Back housing: Die cast aluminum alloy
Mounting	Panel Mount
OS Support	Windows 11 LTSC
Security	TPM 2.0 (built-in)
Power Consumption	Typ. 46W; Max. 82W
Power Input	19 - 24 V_{DC} ± 15%
Watchdog Timer	15-255 sec (system)
Weight (Net)	6KG

System Hardware

CPU	13th Gen. Intel® Core™ i7-1365URE 1.7 GHz Deca-core processor
Memory	Single DDR5 4800 SO-DIMM RAM 32GB
LAN	2 x 2.5 GbE with Intel® i226
Storage	1x M.2 2280 sTLC Solid State Drive 256GB & 512GB TLC Solid State Drive 256GB & 512GB 1 x 2.5 SATA (Optional through customization) sTLC Solid State Drive 256GB & 512GB TLC Solid State Drive 256GB & 512GB

*Detailed information listed in "Explosion Proof Certified Component"

I/O	1 x Displayport 1.4a (Video output) 1 x USB Type-C (USB 3.2 Gen.2, DP 1.4a, 5V w/ 3A max) 2 x USB 3.2 (Gen.1) 2 x USB 2.0 2 x RS-232/422/485

LCD Display

Display Type	FHD TFT LED LCD
Display Size	18.5"
Max. Resoltuion	1920 x 1080
Max Colour	16.7M
Luminance cd/m²	350 cd/m²
Viewing Angle (H/V°)	178°/178°
Backlight Life	50,000 hrs
Contrast Ratio	1000:1

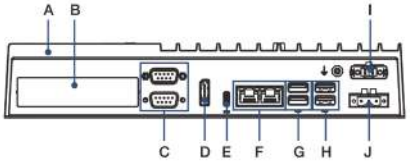
Touchscreen

Light Transmission	Above 85%
Resolution	Linearity
Type	PCAP touch screen

Environment

Humidity	95% RH @ 40°C, non-condensing
Ingress Protection	IP66-rated front panel
Operating Temperature	-20~60 °C (-4~140 °F) (w/o air flow)
Storage Temperature	-30~70 °C (-22~158 °F)
Vibration Protection	With SSD: 1 Grms (5 ~ 500 Hz) (Operating, random vibration)

Rear View

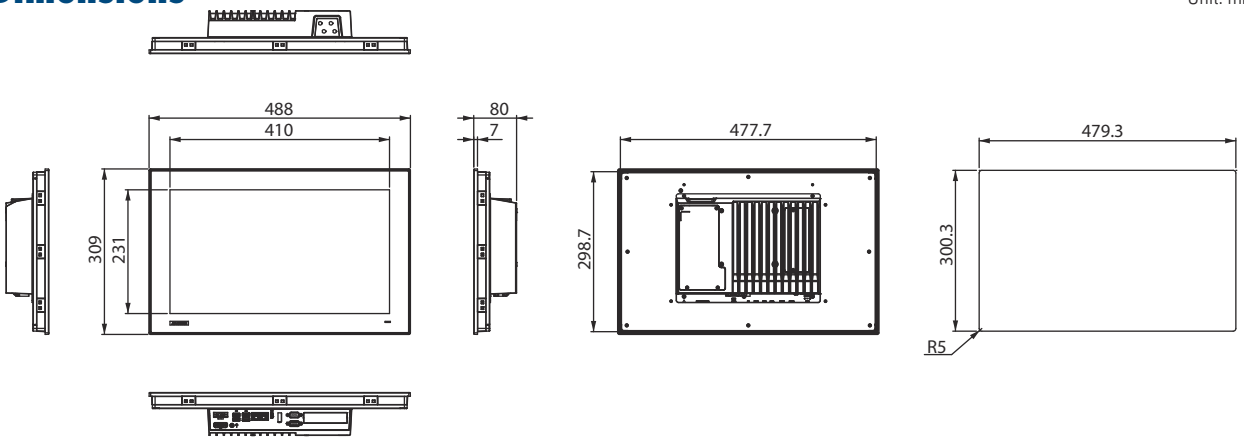


A. Chassis
B. iDoor Slot (Not Expandable)
C. RS-232/422/485
D. Display Port
E. USB Type-C
F. 2.5GbE LAN
G. USB 3.2
H. USB 2.0
I. Remote Button
J. Power DC IN

All product specifications are subject to change without notice.
Last updated: 25-Aug-2025

Dimensions

Unit: mm



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

Ordering Information

- **SPC-618WE-PUD75A** 18.5" FHD Panel PC, ATEX, Intel® i7-1365URE, 32GB DDR5, 256GB SSD
- **SPC-618WE-PUD75B** 18.5" FHD Panel PC, ATEX, Intel® i7-1365URE, 32GB DDR5, 512GB SSD
- **SPC-618WE-PUD74C** 18.5" FHD Panel PC, ATEX, Intel® i7-1365URE, 16GB DDR5, 256GB SSD, Model for China Region
- **SPC-618WE-PUD74D** 18.5" FHD Panel PC, ATEX, Intel® i7-1365URE, 16GB DDR5, 512GB SSD, Model for China Region

Optional Accessories

- **96PSA-A150W24T2-4** 150W 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

- **20701WLH1S0004** Win11 LTSC for SPC-618WE
- **20701U24DS0001** Ubuntu for SPC-618WE

Explosion Proof Certification

II 3 G Ex ec IIC T4 Gc
II 3 D Ex tc IIIC T76°C Dc
UL 24 ATEX 3284X
IECEx UL 24.0074X
-20°C ≤ Ta ≤ +60°C

c UL us LISTED E322252
Class I,Division 2.
Group A,B,C and D
Temp.Code T4
Ambient -20°C to +60°C

Explosion Proof Certified Component

Item	Part Number	Description	Note
Memory	SQR-SD5I16G4K8SNBB	SODIMM DDR5 4800 16GB 2Gx8 (-40-85°C) Samsung	
	SQR-SD5I32G4K8SNBB	SODIMM DDR5 4800 32GB 2Gx8 (-40-85°C) Samsung	
Storage	SQF-S8BZ4-256GDSDE	SQF M.2 2280 SSD 650 256G 3D sTLC BiCS5 (-40~85°C)	sTLC
	SQF-S8BZ4-512GDSDE	SQF M.2 2280 SSD 650 512G 3D sTLC BiCS5 (-40~85°C)	sTLC
	SQF-S8BV1-256GDSDM	SQF SATA M.2 2280 650-D 256G 3D TLC BiCS5 (-20~85°C)	TLC
	SQF-S8BV2-512GDSDM	SQF SATA M.2 2280 650-D 512G 3D TLC BiCS5 (-20~85°C)	TLC
	SQF-S25Z4-256GDSDE	SQF 2.5" SSD 650 256G 3D sTLC BiCS5 (-40~85°C)	sTLC
	SQF-S25Z4-512GDSDE	SQF 2.5" SSD 650 512G 3D sTLC BiCS5 (-40~85°C)	sTLC
	SQF-S25V1-256GDSDM	SQF 2.5" SATA SSD 650-D 256G 3D TLC (BiCS5) (-20~85°C)	TLC
	SQF-S25V2-512GDSDM	SQF 2.5" SATA SSD 650-D 256G 3D TLC (BiCS5) (-20~85°C)	TLC
WI-FI	EWM-W165M203E (TPC-WLAN)	Wi-Fi 6E + BT Module 2.4/5/6GHz M.2 2230 noVpro	802.11ax

Packing List

Item	Part No.	Description	Qty
Grounding cable	1703011001-11	A Cable G-TEM 4.3 100CM C=GR/Y	1
Power Connector	1652007930-01	Plug-In Block 1x3P/5.08mm/PA66/F/VA	1
Warranty	2190000902	CARDBOARD-WARRANTY REV. A2	1
VESA Screw	1930005204	Screw M4x10L R/S DH=6.8x2.50 + ST ZBK PL	4
China RoHS	202KAKMC00	China rohs for AKMC model name 1st ed	1

Please contact Advantech for certificate compliance.