

FPC-21W42

21.5" 13th Generation Intel® Core™ i3/ i5/ i7 Processors
Full-flat Rugged Multi-touch Panel PC With Active Cooling
and Expansion Slot



Features

- Onboard Raptor Lake S 13th Intel® Core™ i3/ i5/ i7 Processor
- 2 x 262-pin DDR5 4800 MHz SO-DIMM sockets support up to 64GB
- 1 x HDMI, 2 x DP, 2 x COM, 4 x USB 3.2, 2 x USB 2.0
- 2 x Intel® Gigabit Ethernet (2.5GbE & 1GbE)
- 1 x 2.5" SATA SSD (optional), 1 x 2280 & 2242 M.2 M-Key with PCIe x4 & SATA 3.0 signal (optional)
- 1 x PCIe x16 expansion slot
- 3 x Independent displays supported (Intel Virtualization)
- Wi-Fi & bluetooth (optional)
- Mic-in, line-out; TPM 2.0
- CPU cooler and system fan design



100 ~ 240V



PCAP
multi-touch



CPU Cooler



0°C ~ 45°C



Front IP65

Specifications

System Information

Processor	13th Generation Intel® Core™ i3/ i5/ i7 Processors Intel® Core™ i7-13700TE (35W, 30M Cache, up to 1.10 GHz) Intel® Core™ i5-13500E (65W, 24M Cache, up to 2.40 GHz) Intel® Core™ i3-13100TE (35W, 12M Cache, up to 2.40 GHz)
System Memory	2 x 262-pin DDR5 4800 MHz SO-DIMM sockets support up to 64GB (non ECC only)
I/O Chipset	Fintek® F81966AB-I
Watchdog Timer	H/W Reset, 5~255 Seconds/5~255 Minutes
H/W Status Monitor	CPU Temperature Monitoring, Voltage Monitoring CPU Fan Speed Control
TPM	TPM 2.0
SBC	MX610H
CPU Cooler (Type)	1 x PWM FAN for CPU

Expansion

Expansion	1 x PCIe x16 Gen4 Slot 1 x M.2 (2230) E-Key support WiFi module, with 1 x PCI-e x1 & USB 2.0 (CNVi Supported)
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Storage

Solid State Drive	1 x 2.5" Drive Bay design (optional)
Other Storage Device	1 x 2280 & 2242 M.2 Slot M Key with PCIe x4 & SATA 3.0 signal (optional)

Display

Graphic Chipset	Intel® UHD Graphic
Spec. & Resolution	2 x DP: Up to 4096 x 2304 @60Hz 1 x HDMI: Up to 3840 x 2160 @30Hz

Audio

Audio Codec	Realtek® ALC897
Audio Interface	Mic-in, Line-out
Speaker Output	2 x 5W

Ethernet

LAN Chipset	1 x Intel® I219-LM GbE LAN PHY, 1 x Intel® I225-V 2.5GbE LAN
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Power Requirement

Power Supply Unit	PSU Flex ATX 300W, 100-240V~, 5-2.5A, 50-60Hz
Power Mode	AT/ATX by jumper (Default Setting: ATX)
Power Connector Type	AC Power input 3P (Male) Connector

Software Support

OS	Win10 / Win11 / Linux
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Certification

Certification Information	CE / FCC Class A / VCCI / UKCA
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Panel

LCD Size; Display Type	21.5", 16:9; Full HD
Resolution	1920 x 1080
Pixel pitch	247.95um (H) x 247.95um (V)
Luminance	250 cd/m²
Contrast ratio	1000
Viewing angle	89 (U), 89 (D), 89 (L), 89 (R)
Response time	14 ms
Backlight	LED
Touch Type	Projective capacitive multi-touch up to 10 points
Touch Light Transmission	89%
Touch Controller	USB touch (EETI)

External I/O

USB Port	4 x USB 3.2 Gen 1, 2 x USB 2.0
Video Port	2 x DP, 1 x HDMI
LAN Port	1 x Intel® I219-LM GbE LAN PHY, 1 x Intel® I225-V 2.5GbE LAN
COM Port	2 x RS232 (default) / 422/485, 2 x RS232 (optional)
DIO Port	1 x 8-bit GPIO (optional)
Switch	1 x Extend Power Switch (optional)

Wireless Communication

WLAN	M.2 keyA/E 802.11ax Dual-band, BT5.2, AX210, NGWGLE.NV, 99ARN4, Intel (optional)
Bluetooth	BT5.2 (optional)

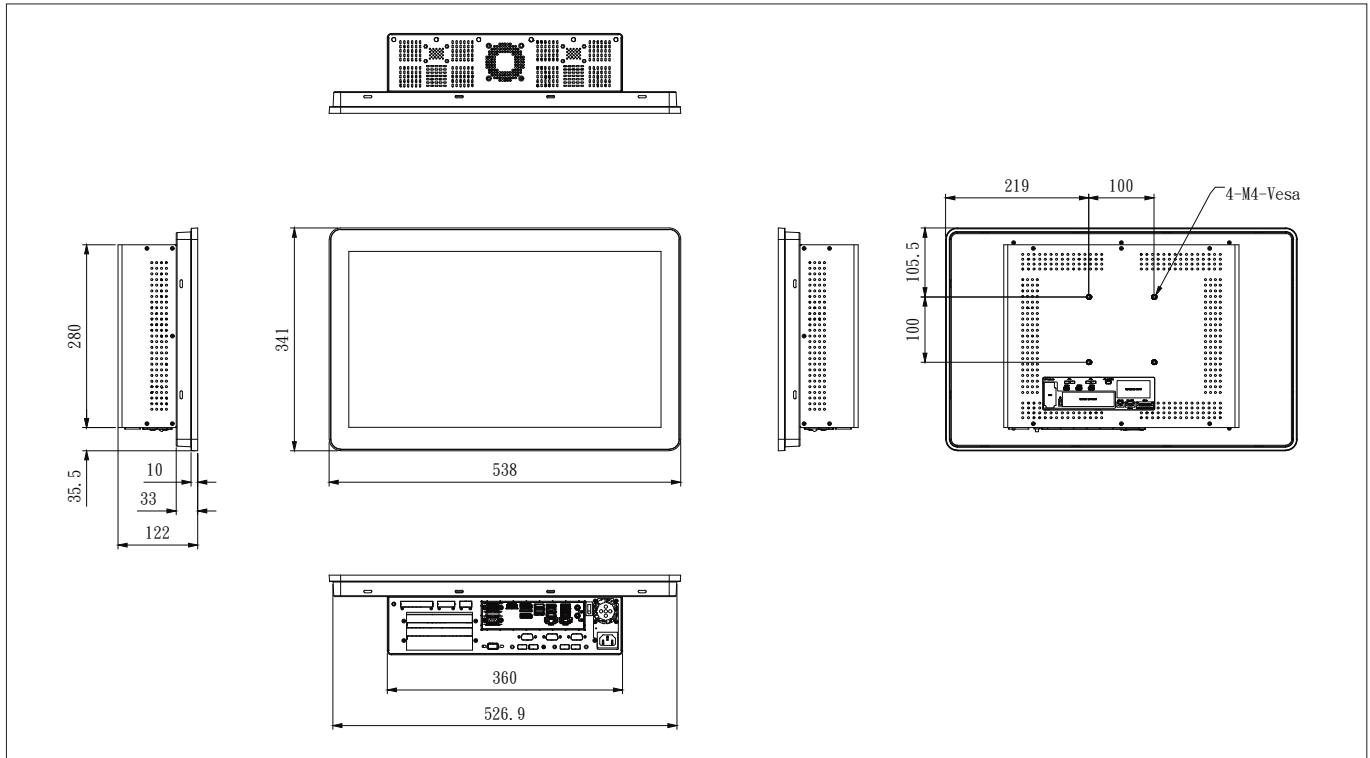
Mechanical & Environmental

Operating Temp.	0°C ~ 45°C
Storage Temp.	-20°C ~ 60°C (-4°F ~ 140°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Dimension	538 x 341 x 122 mm
Weight	12.6 Kg
Vibration Test	With SSD/M.2 SSD : 1.5Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 30mins/axis
Shock Test	Operating with SSD/M.2 : MIL-STD-810G, method 516.6, procedure I, functional shock=10G
Drop Test	ISTA 2A, IEC 60068-2-32 Test:Ed
IP Rating	Front IP65
Mounting Kit	Wall / Stand / VESA 75mm x 75mm, 100mm x 100mm Panel mount with mounting kits
Power Mode	AT/ATX by jumper (Default Setting: ATX)
System Fan	1 x PWM FAN for System
Construction	Aluminum Die-casting (Front), Metal black (Rear)

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Mechanical Drawing



Ordering Information

P/N	Touch Type	Processor	Memory	Storage	Resolution	Luminance	COM	USB	LAN	Power Input	Working Temp.	OS Support
FPC-21W42-X0000-1R	PCAP	Intel® Core™ i3-13100TE Intel® Core™ i5-13500E Intel® Core™ i7-13700TE	2 x 262-pin DDR5 4800 MHz SO-DIMM	2.5 SSD/HDD (optional) 2280 & 2242 M.2 M-Key (optional)	1920 x 1080	250	2	6	2	100-240V, 5-2.5A, 50-60Hz	0°C ~ 45°C	Win 10 Win 11 Linux

Packing List

Item	P/N	Quantity
HDD Screws (4pcs)	ACC-SCREW-0005R	2
HDD Shockproof rubbers (4pcs)	ACC-RUBBER-0001R	2
VESA Screws (4pcs)	ACC-SCREW-0002R	1
PCIe Screws	E19330B0400R	2

Optional Items

Item	P/N
USA Power Cord	E1702031833R
EU Power Cord	E1702031000R
Japan Power Cord	E1702031834R
UK Power Cord	E1702031830R
Australia Power Cord	E1702031831R

I/O Overview

