ARC-1742-C1

17" 12/13th Intel® Core™ Processor
Advanced Rugged panel PC

Features

- 12/13th Generation Intel® Core™ i3/i5/i7 Processors (Non-embedded CPU)
- 2 x 260-Pin DDR4 3200MHz non-ECC SO-DIMM Socket Supports Up to 2 x 32GB
- 1 x HDMI,1 x DP++, 2 x LAN, 6 x USB3.2 Gen1x1
- 1 x RS485 (optional to RS232), 2 x RS232 (default)
- Wi-Fi & BT & 5G (optional)
- TPM 2.0
- 10 points multiple PCAP touch
- 3 x RS232 / 1 x GPIO / 2 x USB2.0 (optional)
- Front panel IP65

+12V	PCAP multi-touch	Fanless	0°C ~ 50°C	Front IP65

Specifications

System Information

Processor	Onboard Intel® 12th/13th Gen Alder Lake & Raptor Lake U series BGA Processor (TDP: 15W) 12th: Intel® Core™ i3-1215U / Intel® Core™ i5-1235U / Intel® Core™ i7-1255U Processor (13th: Intel® Core™ i3-1315U / Intel® Core™ i5-1335U / Intel® Core™ i7-1355U Processor)
System Memory	2 x 260-Pin DDR4 3200MHz non-ECC SO-DIMM Socket Supports Up to 2 x 32GB
I/O Chipset	ITE IT8786E-I
Watchdog Timer	Reset, 1sec. – 65535sec./min.1sec. or 1min. step
H/W Status Monitor	CPU temperature monitoring Voltage monitoring CPU fan speed control
TPM	Onboard Infineon SLB 9670VQ2.0 support SPI TPM 2.0
SBC	EMX-ALUC
CPU Cooler (Type)	Fanless heatsink
Other	AUX-089 (SIM card expansion card)

Expansion

Expansion	1 x M.2 Key-B 2242/3052 with USB3.2 Gen1x1 or PCIe x1 Signal, SIM card wafer for LTE/IO Cards support WWAN+GNSS or PCIe x1 SSD, and USB2.0 1 x M.2 Key-E 2230 support Wi-Fi+BT module (1 x PCIe x1 & USB 2.0 Signal) 1 x M.2 Key-M 2280 (PCIe x4/SATA) slot for storage NVMe/SATA SSD (Auto Detect)

Storage

Storage	1 x 2.5" Drive Bay design 1 x M.2 Key-M 2280 (PCIe x4/SATA) slot for storage NVMe/SATA SSD (Auto Detect)
Other Storage Device	1 x M.2 Key-M 2280 (PCIe x4/SATA) slot for storage NVMe/SATA SSD (Auto Detect)

Audio

Audio Codec	Realtek ALC888S HD Audio Decoding Controller
Speaker Output	2 x 5W speaker

Ethernet

LAN Chipset	1 x Intel® I210AT Gigabit Ethernet Controller 1 x Intel® I219-LM for core i5 CPU or 1 x Intel® I219V for i3 CPU Gigabit Ethernet Controller
Ethernet Interface	LAN1: Intel® I210AT 10/100/1000 Base-Tx GbE compatible LAN2: Intel® I219-LM/I219V 10/100/1000 Base-Tx GbE compatible

Power Requirement

DC Input	DC in +12V
DC Input Connector	Lockable DC Jack (default), Optional for phoenix connector
ACPI	Single power ATX support S0, S3, S4, S5 and ACPI 3.0 compliant

Software Support

OS	Win10 / Win11 / Linux

Certification

Certification Information	CE / FCC Class A / UKCA

Panel

LCD Size	17", 4:3
Display Type	SXGA
Resolution	1280 x 1024
Pixel Pitch	0.264mm (H) x 0.264mm (V)
Luminance	250 cd/m²
Contrast Ratio	1000
Viewing Angle	80 (U), 80 (D), 85 (L), 85 (R)
Response time	5 ms
Backlight	TFT-LCD
Touch Type	Projective capacitive multi-touch up to 10 points
Touch Light Transmission	89%
Touch Controller	ILITEK ICI2510P

External I/O

USB Port	6 x USB3.2 Gen1x1; 2 x USB 2.0 on bottom (optional, multi-purpose I/O for USB/COM/GPIO) or on top (optional) *The maximum expandable USB 2.0 are 2 ports.
LAN Port	2 x RJ-45
COM Port	1 x RS485 (optional to RS232), 2 x RS232 (default) 3 pre-cut hole for 3 x RS232 / 1 x GPIO / 2 x USB2.0 (optional)
HDMI	1 x HDMI 2.0
Display Port	1 x DP++ 1.4a
Antenna	2 x Antenna Mounting with Dust Cover 4 x Antenna Mounting with Dust Cover for 5G

System Control

LED Indicator	HDD LED, power LED

Data Communication

WLAN	IEEE802.11 ac/a/b/g/n 2.4 GHz, 5 GHz (optional)
Bluetooth	BT5.1 (optional)

Mechanical & Environmental

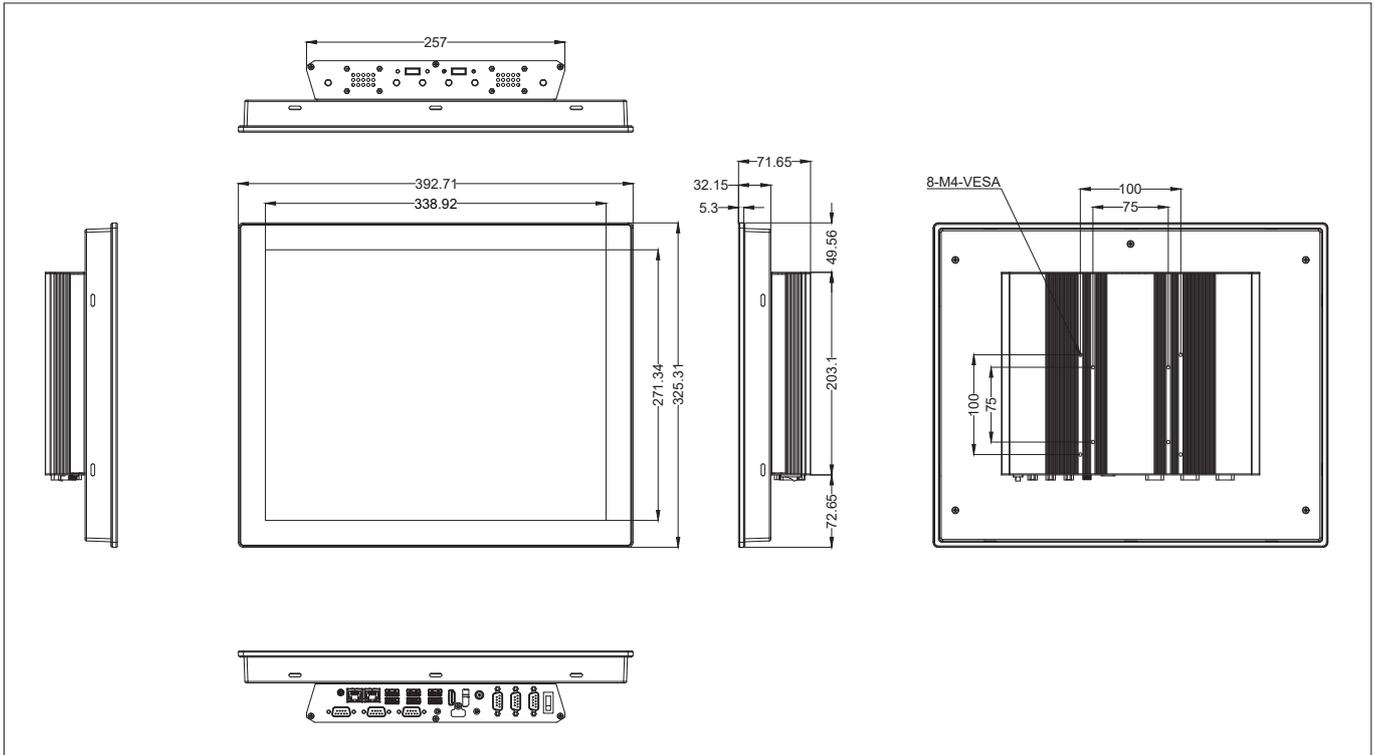|	
Operating Temp.	0°C ~ 50°C (32°F ~ 122°F)
Storage Temp.	-20°C ~ 60°C (-4°F ~ 140°F)
Operating Humidity	40°C @ 95% Relative humidity, non-condensing
Dimension (W x L x H)	392.7 x 325.3 x 71.65mm
Weight	5.6 Kg
Vibration Test	With SSD/M.2 SSD : 1.5Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 30min/axis
Shock Test	Operating with SSD/M.2 SATA : IEC 60068-2-27 testing procedures, 10G for operation mode
Drop Test	ISTA 2A, IEC-60068-2-32 Test:Ed
IP Rating	Front panel IP65
Mounting Kit	Wall / Stand / VESA 75mm x 75mm, 100mm x 100mm Panel mount with mounting kits
Construction	Die casting with cover lens (Front), Aluminum + SGCC (Rear)

Component

Adapter	Input: 100 ~ 240Vac / 50 ~ 60Hz Output: 120W adapter (24V @ 5A)

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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
ARC-1742-215-C1R	PCAP	Intel® Core™ i3-1215U	2 x 260-pin DDR4 3200 MHz SO-DIMM	2.5""SSD M.2 type M	1280 x 1024	250	3	6	2	+12V	0°C ~ 50°C	Win10 / Win11 / Linux
ARC-1742-235-C1R	PCAP	Intel® Core™ i5-1235U	2 x 260-pin DDR4 3200 MHz SO-DIMM	2.5""SSD M.2 type M	1280 x 1024	250	3	6	2	+12V	0°C ~ 50°C	Win10 / Win11 / Linux
ARC-1742-255-C1R	PCAP	Intel® Core™ i7-1255U	2 x 260-pin DDR4 3200 MHz SO-DIMM	2.5""SSD M.2 type M	1280 x 1024	250	3	6	2	+12V	0°C ~ 50°C	Win10 / Win11 / Linux

Packing List

Item	P/N	Quantity
M4 x 6mm VESA Screw	ACC-SCREW-0002C	4
HDD Screw 4pcs-Sink (D5) M3 x 4 BK A1	ACC-SCREW-0003C	4
4pcs-Bind (D5.4) IMS M3 x 4 Ni A1	ACC-SCREW-0004C	4

Optional Items

Item	P/N
Intel AX210 WIFI6 M.2 2230 A-Key kit	C971XAR38C1000R
Intel8265NGW M.2 2230 NGFF BT4.2 kit	C971XAR38C1001R
Wifi 802.11 ac/a/b/g/n,2T2R, BT5.1 kit	C971XAR38C1002R
4G LTE Module, SIM7600G-H-M2, SIMCOM	C971XAR38C1003R
US Power Cord SM001/3P + SM006/3P 1.83M	C170P060040R
EU Power Cord SH005/3P + SH006/3P 1.83M	C170P060050R
JP Power Cord SH001/3P + SH006/3P 1.83M	C170P060060R
UK Power Cord YP61A/3P + YC12/3P 1.83M	C170P060070R
AU Power Cord SH051/3P + SH006/3P 1.83M	C170P060080R

I/O Overview

Panel Mount
Power Switch
3 x COM
DC in
Display Port
HDMI
6 x USB
Option for COM/GPIO/USB
2 x LAN

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Technology Inc.