

ARC-21W38-C1

21.5" 11th Intel® Core™ Processor Fanless
Rugged Touch Panel PC



Product Features

- 11th Generation Intel® Core™ i3/i5/i7 Processors (Non-embedded CPU)
- 1 x RS232/422/ 485(default), 2 x RS232(default)
- TPM 2.0
- 2 x 260-pin DDR4 3200 MHz SO-DIMM socket, supports up to 64GB max
- Front panel IP65
- 2 x LAN, 3 x USB3.2 Gen2, 1x USB3.2 Gen1
- Wi-Fi & BT (optional)
- 10 points multiple PCAP touch
- 3 x RS232 or GPIO or USB2.0 (optional)

Specification

System Information

Processor	11th Generation Intel® Core™ i3/i5/i7 Processors (Non-embedded CPU) Intel® Core™ i7-1165G7 Processor, 12M Cache, up to 2.80 GHz Intel® Core™ i5-1135G7 Processor, 8M Cache, up to 2.40 GHz Intel® Core™ i3-1115G4 Processor, 6M Cache, up to 3.00 GHz
System Memory	2 x 260-pin DDR4 3200 MHz SO-DIMM socket, supports up to 64GB max
I/O Chipset	NuvoTon_NCT6126D
Watchdog Timer	H/W Reset, 1sec. - 65535sec./min.1sec. or 1min. step
H/W Status Monitor	Monitoring CPU & system temperature and voltage
TPM	Onboard NuvoTon NPCT754AADYX support TPM 2.0
SBC	EMX-TGLC-B1
CPU Cooler (Type)	Fanless heatsink
Other	AUX-089 (SIM card expansion card)

Expansion

Expansion	1 x M.2 Key B+M 3042/3052/2242/2260/2280 support 1xPCIEx1/SATA/USB3.0/USB2.0 with 1 x SIM card slot, support WWAN+GNSS 1 x M.2 Key E 2230 support WiFi module and CNVi (1 x PCI-e x1 & USB 2.0 signal)
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Storage

Storage	M.2 type B 3042/3052/2242/2260/2280 SSD (SATA)
Other Storage Device	Reserve space for future1 x 2.5 drive Bay design

Audio

Audio Codec	Realtek ALC897 co-lay ALC888S (Default: ALC897)
Speaker Output	2 x 5W

Ethernet

LAN Chipset	1 x Intel® I219LM Gigabit Ethernet PHY (LAN1) 1 x Intel® I226LM 2.5 Gigabit Ethernet (LAN2)
Ethernet Interface	Intel® I219LM : 10/100/1000 Base-Tx GbE compatible Intel® I226LM: 10/100/1000/2.5G Base-Tx GbE compatible

Power Requirement

DC Input	+12V ~ +24V
DC Input Connector	Mini-DIN 4pin DC-in
Adapter	Input: 100~240Vac / 50~60Hz Output: 120W adapter (24V @ 5A)
ACPI	Single power ATX support S0, S3, S4, S5 and ACPI 3.0 compliant

Software Support

OS	Win10 / Win11 / Linux
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Certification

Certification Information	CE/ FCC Class B/ UKCA / LVD / VCCI
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Panel

LCD Size	21.5", 16:9
Display Type	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	20 ms
Backlight	TFT-LCD
Touch Type	Projective capacitive multi-touch up to 10 points
Touch Light Transmission	>=85%
Touch Controller	ILITEK ICI2322

External I/O	
USB Port	3 x USB3.2 Gen2, 1 x USB3.2 Gen1 3 x RS232 or GPIO or USB2.0 (optional)
LAN Port	2 x RJ-45
COM Port	1 x RS232/422/485(default) 2 x RS232 (default) 3 x RS232 or GPIO or USB2.0 (optional)
Display Port	2 x DP++: 1920 x 1080@60 Hz
Antenna	2 x Antenna Mounting with Dust Cover 4 x Antenna Mounting with Dust Cover for 5G

System Control	
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LED Indicator	HDD LED, power LED
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Data Communication	
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WLAN	IEEE802.11 ac/a/b/g/n 2.4 GHz, 5 GHz (optional)
Bluetooth	BT5.1 (optional)

Mechanical & Environmental	
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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)	538.05 x 341.05 x 63.55mm
Weight	10.1 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
Power Mode	AT/ATX (ATX is default)
System Fan	Fanless
Construction - Front	Die casting with cover lens
Construction - Rear	Black die casting

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

Ordering Information

ARC-21W38-3G4-C2R
ARC-21W38 w/i3-1115G4/PCAP/3COM/4USB/2LAN/2DP/Barebone, w/o Memory/storage/Kit

ARC-21W38-5G7-C2R
ARC-21W38 w/i5-1135G7/PCAP/3COM/4USB/2LAN/2DP/Barebone, w/o Memory/storage/Kit

ARC-21W38-7G7-C2R
ARC-21W38 w/i7-1165G7/PCAP/3COM/4USB/2LAN/2DP/Barebone, w/o Memory/storage/Kit

C971XAR38C1000R
Intel AX210 WIFI6 M.2 2230 A-Key kit

C971XAR38C1001R
Intel8265NGW M.2 2230 NGFF BT4.2 kit

C971XAR38C1002R
Wifi 802.11 ac/a/b/g/n,2T2R, BT5.1 kit

C971XAR38C1003R
4G LTE Module, SIM7600G-H-M2, SIMCOM

C971XAR38C1004R
SIMCOM, SIM8202G(USB3.0)

C971XAR38C1005R
COM Kit for ARC-1738-C1

C971XAR38C1006R
USB Kit for ARC-1738-C1

C971XAR38C1007R
GPIO Kit for ARC-1738-C1

C170P060040R
US Power Cord SM001/3P+SM006/3P 1.83M

C170P060050R
EU Power Cord SH005/3P+SH006/3P 1.83M

C170P060060R
JP Power Cord SH001/3P+SH006/3P 1.83M

C170P060070R
UK Power Cord YP61A/3P+YC12/3P 1.83M

C170P060080R
AU Power Cord SH051/3P+SH006/3P 1.83M
