

ARC-21W39

**21.5" Intel® Processor N97/ X7433RE /N150
Fanless Rugged Touch Panel PC with IET
Expansion**



Product Features

- 21.5" FHD LCD with PCAP multi-touch
- Full flat front panel with projected capacitive touch supports multi touch
- Rich I/Os, 2 LAN, 2 COM, 2 USB, 1 USB Type C, SIM card slot, swappable drive bay, speaker out for flexible expansion modules
- Fanless operation from -10 ~ 50°C
- Service window, easy to install memory module
- TPM2.0
- Intel® Processor N97/ X7433RE /N150 (Option Core i3-N305/ i3-N355)
- 1 x 204-pin DDR5 SODIMM socket, supports up to 32GB 4800MHz Max (non ECC only)
- Rugged design for vibration & shock protection
- Wide range DC power input from +12 ~ 24Vdc
- Front panel: IP65, rear: IP41(except I/O)

Specification

System Information

Processor	Intel® Alder Lake-N N97, 6M Cache, up to 3.6 GHz, 12W Intel® Amston Lake X7433RE, 6M Cache, up to 3.40 GHz, 9W Intel® Twin Lake N150, 6M Cache, 0.8 GHz up to 3.60 GHz, 6W
System Memory	1 x 262-pin DDR5 4800MHz SO-DIMM socket, supports up to 32GB Max (non ECC only)
Watchdog Timer	H/W reset, 1sec. ~ 65535sec./1sec.step
H/W Status Monitor	Monitoring CPU & system temperature and voltage
SBC	ARC-ASL
CPU Cooler (Type)	Fanless heatsink
Other	3 x Knockouts for antenna mounting

Expansion

Expansion	1 x M.2 (Key-B, 2242/3042/3052, SATAIII, USB3.2 Gen1x1(default, 5Gbp/s)) or PCIe1x1(via OEM BIOS request), USB2.0, SIM Slot for LTE Cards (*Not support PCIe2 device)
	1 x M.2 (Key-E, 2230, PCIe1, USB2.0)
	1 x optional by IET module

Storage

Storage	1 x 2.5 Drive bay(7mm HDD restricted)
HDD/ SSD	1 x SATA3
Other Storage Device	1 x M.2 Key-B 2242/3042/3052 for M.2 SATAIII SSD by default

Audio

Audio Codec	Realtek ALC888S
Speaker Output	2 x 2W

Ethernet

LAN Chipset	2 x Intel® I226LM 2.5 Gigabit Ethernet
Ethernet Interface	10/100/1000/2.5G Base-Tx GbE compatible

Power Requirement

DC Input	+12V ~ +24V
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	Win 10/ Win11 / Linux
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Certification

Certification Information	CE / FCC Class A
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Panel

LCD Size	21.5", 16:9
Display Type	FHD
Resolution	1920 x 1080
Pixel pitch	247.95um(H) x 247.95um(V)

Luminance	500 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	2 x USB3.2 (1 x double deck, type A) 1 X USB type C (w/ PD(20V/3A input), USB3.2(Gen2x1, 10Gbps, 5V/3A output), display function)
LAN Port	2 x RJ-45
COM Port	1 x RS-232/422/485 1 x RS-232

Internal I/O

Expansion	1 x M.2 (Key-B, 2242/3042/3052, SATAIII, USB3.2 Gen1x1(default, 5Gbp/s)) or PCIe1x1(via OEM BIOS request), USB2.0, SIM slot for LTE cards (*Not support PCIe2 device) 1 x M.2 (Key-E, 2230, PCIe1, USB2.0) 1 x 80-pin IET interface
DIO	12-bit GPIO + 2-pin CAN bus (by ARC-BYT DB-E)
Other	3 x Knockouts for antenna mounting

System Control

LED Indicator	HDD LED, power LED
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Mechanical & Environmental

Operating Temp.	-10°C ~ 50°C (14°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 60.05mm
Weight	7.3 Kg
Vibration Test	With SSD/mSATA : 1.5Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 1hr/axis

Shock Test	Operating with SSD/CFast/mSATA : MIL-STD-810G, method 516.6, procedure I, functional shock=20G
Drop Test	ISTA 2A, IEC-60068-2-32 Test:Ed
IP Rating	Front panel IP65 Back cover IP41
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: 72W adapter (19V @ 3.78A adapter) AC-DC adapter
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Ordering Information

ARC-21W39-150-B1R

21.5" 1920x1080 Industrial Touch Panel PC, ErP Design, PCAP Multi Touch
Intel Processor N150, 3.60 GHz CPU/2GLAN/2COM/2USB3/USB typeC/SPK/12~24V
input/72W Adapter

ARC-21W39-355-B1R

21.5" 1920x1080 Industrial Touch Panel PC, ErP Design, PCAP Multi Touch
Intel Processor i3-N355, 3.90 GHz CPU/2GLAN/2COM/2USB3/USB typeC/SPK/12~24V
input/72W Adapter

ACC-ARC-USB-1R

4 x USB 3.0 Kit for ARC Series

ACC-ARC-AUDIO-1R

HDMI + 5.1 CH Audio Kit for ARC Series

ACC-ARC-MPCIE-1R

HDMI + MPCIE w/SIM Kit for ARC Series

ACC-ARC-COM-1R

2 x Isolated RS-232 Kit for ARC Series

ACC-ARC-COM-2R

3 x RS-232 Kit for ARC Series

ACC-ARC-COM-3R

2 x RS-232 + USB Kit for ARC Series

ACC-ARC-COM-4R

2 x RS-232 + LAN Kit for ARC Series

ACC-ARC-GPIO-1R

12-bit GPIO + 2-pin CAN Bus Kit for ARC Series

ACC-ARC-OBDDI-1R

OBDDI - CAN Bus Kit for ARC Series (OBDDI/EOBD for Small Vehicle)

ACC-ARC-OBDDI-2R

OBDDI - CAN Bus Kit for ARC Series (J1939J1708 for Large Vehicle)

ACC-ARC-OBDDI-3R

OBDDI - CAN Bus Kit for ARC Series (ISO15765-4 for Special Large Vehicle)

ACC-ADP-060N-08R

AC/DC adapter 12V/5A 90 degree Screw Type

E1702031835R

USA Power Cord

E170203183DR

EU Power Cord

E170203183BR

Japan Power Cord

E170P060370R

UK Power Cord

E170P060392R

Australia Power Cord