



AI EDGE INFERENCE COMPUTER

RCO-6000-RPL-4NH

AI Edge Inference Computer w/ LGA 1700 for Intel 12/13th Gen CPU & R680E PCH, 4x U.2 15mm NVMe, Hardware RAID



Features

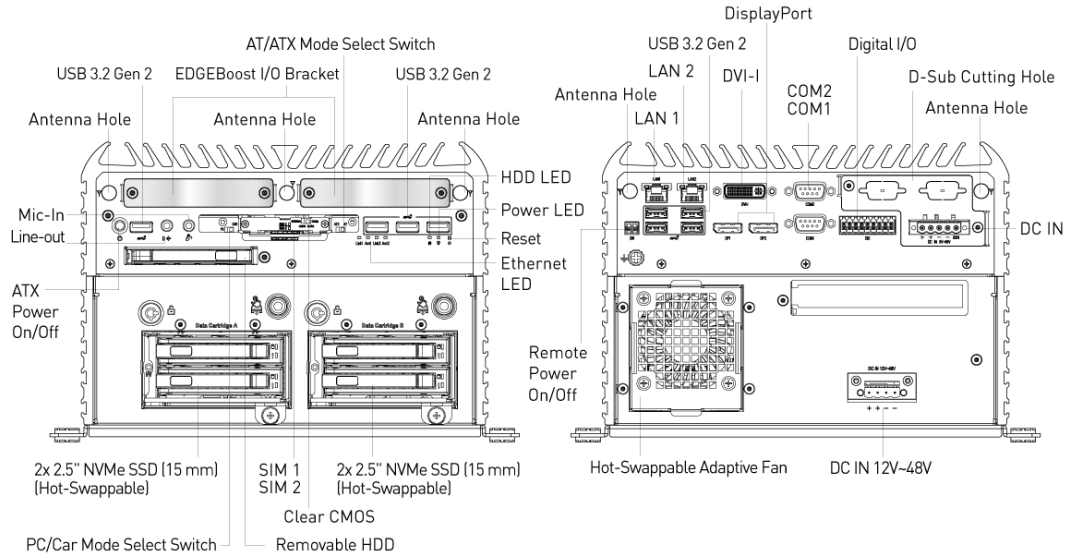
- LGA 1700 socket for 12/13th Gen. Intel® ADL & RPL Processor (35W TDP)
- Intel® R680E Chipset
- 2x DDR5 4800/5600MHz SODIMM. Max. up to 64GB
- Triple Independent Display: 2x DisplayPort, 1x DVI-I
- 2x Intel® 2.5 GbE supporting Wake-on-LAN and PXE
- 2x Full-size Mini PCIe for communication or expansion modules, 2x SIM socket
- 4x 15mm Hot-swappable U.2 NVMe SSD with Hardware RAID 0, 1, 5, 6, 10
- 1x 9mm 2.5" SATA SSD (Internal), 1x 7mm 2.5" SATA SSD (Hot-swap)
- 1x M.2 (E Key, PCIe x1, USB 2.0, 2230)
- 6x RS-232/422/485 (4x internal), 8x USB 3.2 Gen 2, 1x USB 3.2 Gen 1 (internal)
- 9 to 48VDC Wide Range Power Input Supporting AT/ATX Mode
- Wide Operating Temperature -25°C to 60°C (35W/ CPU)
- TPM 2.0 Supported

Specifications

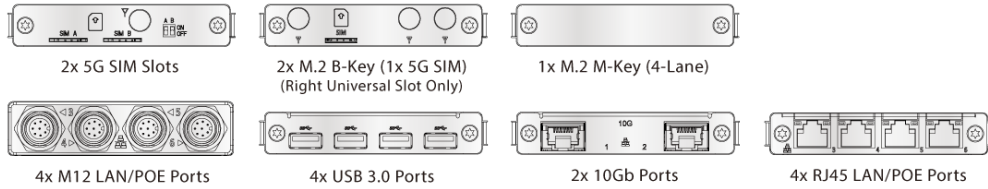
System		USB	8x USB 3.2 Gen 2 (10 Gbps) 1x USB 3.2 Gen 1 (5 Gbps, 1x Internal), 2x USB 2.0 (Internal)
Processor		Others	5x WiFi Antenna Holes 1x Power Switch, 1x AT/ATX Switch, 1x Remote Power On/Off 1x PC/Car Mode Switch, 1x Delay Time Switch 1x Removable CMOS Battery
Support 12/13th Gen Intel® ADL & RPL Processor (LGA 1700, 35W TDP)			
- Intel® Core™ i9-13900TE/i9-12900TE, up to 24 Cores, 36MB Cache, up to 5 GHz, 35W			
- Intel® Core™ i7-13700TE/i7-12700TE, up to 16 Cores, 30MB cache, up to 4.8 GHz, 35W			
- Intel® Core™ i5-13500TE/i5-12500TE, up to 14 Core, 24MB Cache, up to 4.5 GHz, 35W			
- Intel® Core™ i3-13100TE/i3-12100TE, up to 4 Cores, 12MB Cache, up to 4.1 GHz, 35W			
System Chipset		Intel® R680E Express Chipset	
LAN Chipset		2.5 GbE1: Intel I226, 2.5 GbE2: Intel I226 Support Wake-on-LAN and PXE, Support TSN	
Audio Codec		Realtek ALC888S	
System Memory		2x 262-Pin DDR5 4800/5600MHz SODIMM. Max. up to 64GB (ECC and Non-ECC)	
Graphics		Intel® UHD Graphics 770/710	
BIOS		AMI 256Mbit SPI BIOS	
Watchdog		Software Programmable Supports 1~255 sec. System Reset	
AI Accelerator		Supports 3x Hailo-8™ modules	
TPM		TPM 2.0	
Display		Operating System	
Display Port		Windows	Windows 10/11
2x DisplayPort, Support resolution 5120 x 3200, Up to 7680 x 4320		Linux	Linux kernel
DVI		Power	
1x DVI-I, support resolution 1920 x 1200		Power Adapter	Optional AC/DC 24V/9.2A, 220W Optional AC/DC 24V/11.67A, 280W (GPU/Card Expansion) Optional AC/DC 24V/15A, 360W (i7/i9 CPU/GPU/Card Expansion)
VGA		Power Mode	AT, ATX
Yes (by optional split cable)		Power Ignition Sensing	Power Ignition Management
Multiple Display		Power Supply Voltage	9~48VDC 12~48VDC for NVMe EDGEboost Node
Triple Display		Power Connector	5-pin Terminal Block 4-pin Terminal Block for NVMe EDGEBoost Node (12V requires 4-pin terminal block)
Storage		Power Protection	OVP (Over Voltage Protection) OCP (Over Current Protection) Reverse Protection
M.2	1x M.2 B Key, 2242/3042/3052 (PCIe x2, Support AI Module/NVMe Storage) (PCIe x1 & USB 3.2 Gen1, Support 4G/5G)	Environment	
mSATA	1x mSATA (Shared by 1x Mini PCI Express)	Operating Temperature	-25°C to 60°C
NVMe	2x Removable Cannister Bricks with 2.5" 4 Bay U.2 NVMe SSD (Support H=15mm) with Hardware RAID 0, 1, 5, 6, 10	Storage Temperature	-30°C to 85°C
SIM Socket	2x External SIM socket (Mini PCIe/M.2 B Key attached)	Relative Humidity	10% to 95% (non-condensing)
SSD/HDD	1x 9mm 2.5" SATA HDD Bay (Internal) 1x 7mm 2.5" SATA HDD Bay (Hot-swappable) 4x 15mm 2.5" NVMe SSD Bay (Hot-swappable) Support RAID 0, 1, 5, 6, 10	Certification	UL 62368 Ed. 3, CE, FCC Class A
Expansion		Vibration	IEC60068-2-64:2008 With HDD: 1 Grms (5 - 500 Hz, 0.5 hr/axis) With SSD: 3 Grms (5 - 500 Hz, 0.5 hr/axis) Designed to comply with MIL-STD-810G Method 514.7 Procedure I
M.2	1x M.2 (E Key, PCIe x1, USB 2.0, 2230)	Shock	IEC60068-2-27:2008 With SSD: 50G half-sin 11ms Designed to comply with MIL-STD-810G Method 516.7 Procedure I
Mini PCIe	1x Full-size Mini PCIe (1x shared by 1x mSATA)	Physical	
Expansion Modules		Dimensions	240 (W) x 261 (D) x 166.9 (H) mm
2x EDGEBoost I/O Brackets:		Weights	10.5 ~ 11.5 kg
• 4-port GbE module with Intel® I350 Chipset, RJ-45/M12 connector (PoE optional)		Construction	Extruded Aluminum with Heavy Duty Metal
• 2-Port RJ45 10GbE with Intel X710 Chipset		Mounting Options	Wall Mounting
• 4-Port USB 3.0 (share PCIe Gen2 x1 bandwidth)			
• 1x M.2 B-Key, 2242 for AI/NVMe, 1x M.2 B-Key, 3042/3052 for 5G/AI/NVMe			
• 1x M.2 M-Key, PCIe x4 Lane, 2242/2260 for AI Module/NVMe			
• 1x M.2 for 5G (B Key, PCIe x1, USB 3.0, 3042/3052), 2x SIM socket, 1x SIM switch			
I/O			
Audio	1x Mic-in, 1x Line-out		
CAN	2x CAN 2.0 A/B 2-pin Internal header		
COM	2x RS-232/422/485 ; 4x RS-232/422/485 (Internal)		
DIO	8 in / 8 out (Isolated)		
EDGEBoost I/O Bracket	2x EDGEBoost I/O Bracket (By mini PCIe interface)		
LAN	2x RJ45		

* All specifications and photos are subject to change without notice.

External I/O Mechanical Layout

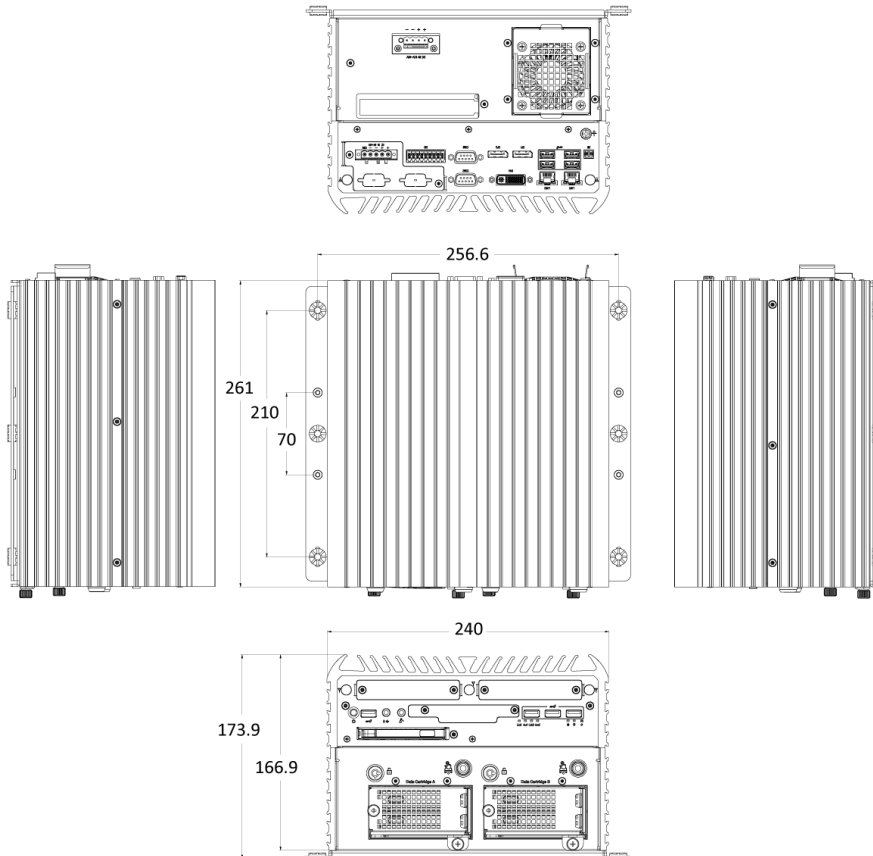


Available EDGEBoost I/O



Dimension

Unit: mm



Available Models

Model No.	Description
RCO-6000-RPL-4NH-P	AI Edge Inference Computer w/ LGA 1700 for Intel® 12/13th Gen CPU & R680E PCH, 2x LAN, 4x U.2 15mm NVMe, Hardware RAID

Optional Accessories

Model No.	Description
1-E09A22102	Adapter AC/DC 24V 9.2A 220W with 3pin Terminal Block Plug 5.0mm Pitch
1-E09A22801	Adapter AC/DC 24V/11.67A 280W with 3pin Terminal Block Plug 5.0mm Pitch
1-E09A36002	Adapter AC/DC 48V/7.5A 360W with 3pin Terminal Block Plug 5.0mm Pitch
999930	Power Cord, 3-pin US Type, 180cm
1-TPCD00002	Power Cord, European Type, 180cm
1-TPCD00001	Power Cord, 3-pin UK Type, 180cm

Packing List

1x RCO-6000-RPL-4NH
 1x Wall Mount Kit
 1x Accessory Kit
 1x DVI to VGA Adapter

Compatible GPU AVL

Model Name	RAM	CUDA Cores	TDP	Display	Interface	Active Cooling	Slots
NVIDIA T1000	8G	896	50	4x mDP	PCIe 3.0 x16	Yes	1
NVIDIA RTX A2000	12G	3328	70	4x mDP	PCIe 4.0 x16	Yes	2
NVIDIA RTX 4000 SFF	20G	6144	70	4x mDP	PCIe 4.0 x16	Yes	2

Exports And Tariff Codes

ECCN	5A992.c
HTS	8471.50.0150
ScheduleB	84.71