



AI EDGE INFERENCE COMPUTER

RCO-6000-RPL

Industrial Computer w/ LGA 1700 for Intel 12/13th Gen CPU & R680E PCH



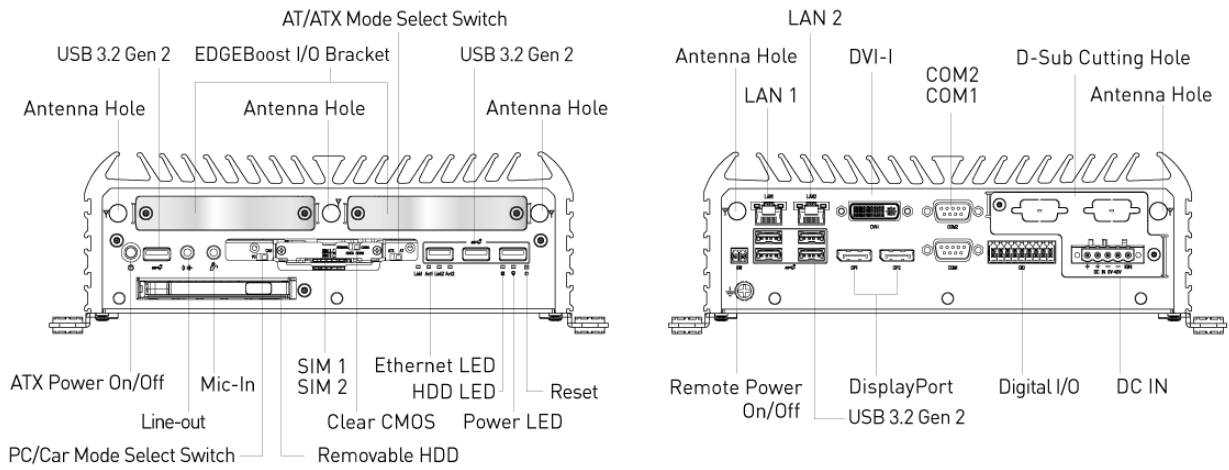
Features

- 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
- 1x Full-size Mini PCIe for communication or expansion modules, 2x SIM socket
- 1x 9mm 2.5" SATA SSD (Internal), 1x 7mm 2.5" SATA SSD (Hot-swap), Support RAID 0, 1
- 1x M.2 (E Key, PCIe x1, USB 2.0, 2230)
- 1x M.2 (B Key, 2242/3042/3052, PCIe x2, Support AI Module/NVMe Storage, PCIe x1 & USB 3.2 Gen1, Support 4G/5G)
- 6x RS-232/422/485 (4x internal), 8x USB 3.2 Gen 2, 1x USB 3.2 Gen 1 (internal)
- 8x DI + 8x DO with isolation
- 9 to 48VDC Wide Range Power Input Supporting AT/ATX Mode
- Wide Operating Temperature -25°C to 70°C (35W CPU)
- TPM 2.0 Supported

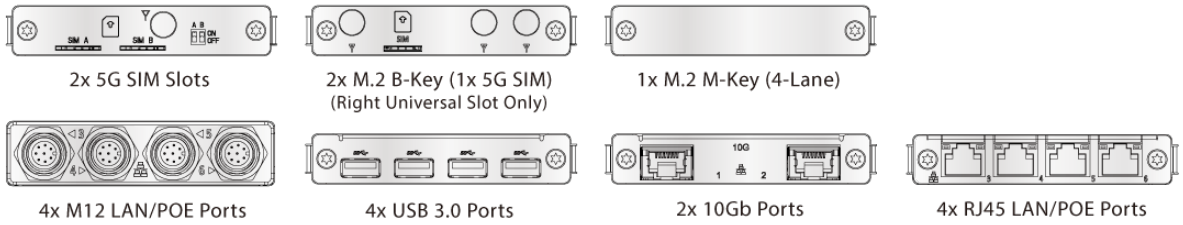
Specifications

System		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
Processor 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			
Display Port 2x DisplayPort, Support resolution 5120 x 3200, Up to 7680 x 4320			
DVI 1x DVI-I, support resolution 1920 x 1200			
VGA Yes (by optional split cable)			
Multiple Display Triple Display			
Storage			
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)			
mSATA 1x mSATA (Shared by 1x Mini PCI Express)			
SIM Socket 2x External SIM socket (Mini PCIe/M.2 B Key attached)			
SSD/HDD 1x 9mm 2.5" SATA HDD Bay (Internal) 1x 7mm 2.5" SATA HDD Bay (Hot-swappable) Support RAID 0, 1			
Expansion			
M.2 1x M.2 (E Key, PCIe x1, USB 2.0, 2230)			
Mini PCIe 1x Full-size Mini PCIe (1x shared by 1x mSATA)			
Expansion Modules 2x EDGEBoost I/O Brackets: <ul style="list-style-type: none"> • 4-port GbE module with Intel® I350 Chipset, RJ-45/M12 connector (PoE optional) • 2-Port RJ45 10GbE with Intel X710 Chipset • 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			
USB 8x USB 3.2 Gen 2 (10 Gbps) 1x USB 3.2 Gen 1 (5 Gbps, 1x Internal), 2x USB 2.0 (Internal)			
Operating System			
Windows Windows 10/11			
Linux Linux kernel			
Power			
Power Adapter Optional AC/DC 24V/9.2A, 220W Optional AC/DC 24V/15A, 360W (i7/i9 CPU)			
Power Mode AT, ATX			
Power Ignition Sensing Power Ignition Management			
Power Supply Voltage 9~48VDC			
Power Connector 5-pin Terminal Block			
Power Protection OVP (Over Voltage Protection) OCP (Over Current Protection) Reverse Protection			
Environment			
Operating Temperature -25°C to 70°C (35W CPU)			
Storage Temperature -30°C to 85°C			
Relative Humidity 10% to 95% (non-condensing)			
Certification UL 62368 Ed. 3, CE, FCC Class A			
Vibration IEC60068-2-64:2008 With HDD: 1 Grms (5 - 500 Hz, 0.5 hr/axis) With SSD: 5 Grms (5 - 500 Hz, 0.5 hr/axis) Designed to comply with MIL-STD-810G Method 514.7 Procedure I			
Shock IEC60068-2-27:2008 With SSD: 50G half-sin 11ms Designed to comply with MIL-STD-810G Method 516.7 Procedure I			
Physical			
Dimensions 240 (W) x 261 (D) x 79 (H) mm			
Weights 4.5 kg			
Construction Extruded Aluminum with Heavy Duty Metal			
Mounting Options Wall Mounting			

External I/O Mechanical Layout

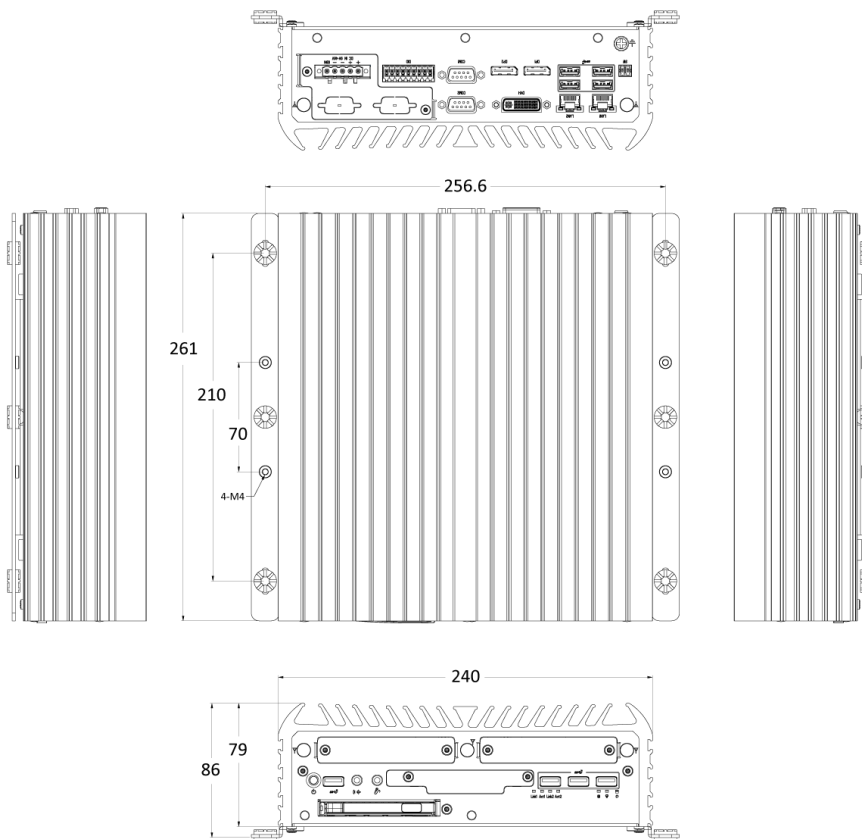


Available EDGEBoost I/O



Dimension

Unit: mm



Available Models

Model No.	Description
RCO-6000-RPL-P	Industrial Computer w/ LGA 1700 for Intel 12/13th Gen CPU & R680E PCH

Optional Accessories

Model No.	Description
1-E09A22801	Adapter AC/DC 24V/11.67A 280W with 3pin Terminal Block Plug 5.0mm Pitch
1-E09A22102	Adapter AC/DC 24V 9.2A 220W 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 Series Embedded System
 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