



AI EDGE INFERENCE COMPUTER

# RCO-6000-CML-2-2PWR

AI Edge Inference Computer with LGA 1200 for Intel 10th Gen Processor and W480E PCH, 1x PCIe x16, 1x PCI, 2x Power input

## Features

- LGA 1200 socket for 10th Gen. Intel® CML S Processor (35W TDP)
- Intel® W480E chipset
- 2x DDR4 2666/2933MHz SODIMM. Max. up to 64GB
- Triple Independent Display: 2x DisplayPort, 1x DVI-I
- 2x Intel® GbE supporting Wake-on-LAN and PXE
- 2x Full-size Mini PCIe for communication or expansion modules, 2x SIM socket
- 3x 2.5" SATA HDD Bay (1x Internal) and with RAID 0, 1, 5 support
- 1x M.2 (E Key, PCIe x1, USB 2.0, 2230)
- 8x RS-232/422/485 (6x internal), 6x USB 3.2 Gen 2, 3x USB 3.2 Gen 1 (1x 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
- 1x PCIe x16 and 1x PCI Expansion
- Edge AI Ready with Hailo-8™ (26 TOPS / 2.5W)
- UL Listed



## Specifications

### System

Processor	Support 10th Gen Intel® CML S Processor (LGA 1200, 35W TDP)
	- Intel® Xeon® W-1290TE, 10 Cores, 20MB Cache, up to 4.5 GHz
	- Intel® Core™ i9-10900TE, 10 Cores, 20MB Cache, up to 4.5 GHz
	- Intel® Core™ i7-10700TE, 8 Cores, 16MB cache, up to 4.4 GHz
	- Intel® Core™ i5-10500TE, 6 Core, 12MB Cache, 3.7 GHz
	- Intel® Core™ i3-10100TE, 4 Cores, 9MB Cache, up to 3.6 GHz

System Chipset	Intel® W480E Chipset
LAN Chipset	GbE1: Intel I219 (Support Wake-on-LAN and PXE) GbE2: Intel I210 (Support Wake-on-LAN and PXE)
Audio Codec	Realtek ALC888S
System Memory	2x 260-Pin DDR4 2666 /2933MHz SODIMM. Max. up to 64GB (ECC and Non-ECC)
Graphics	Intel® UHD Graphics 630
BIOS	AMI 256Mbit SPI BIOS
Watchdog	Software Programmable Supports 1~255 sec. System Reset
AI Accelerator	Supports 4x Hailo-8™ modules
TPM	TPM 2.0

### Display

Display Port	2x DisplayPort, support resolution 4096 x 2304, DP++
DVI	1x DVI-I, support resolution 1920 x 1200
Multiple Display	Triple Display
VGA	Yes (by optional split cable)

### Storage

SIM Socket	2x External SIM socket (Mini PCIE attached)
SSD/HDD	1x Internal 2.5" SATA/SSD HDD Bay (support H=9mm) 2x Removable 2.5" SATA HDD Bay (support H=7mm, Hot-swappable) Support RAID 0, 1, 5

### Expansion

M.2	1x M.2 (E Key, PCIe x1, USB 2.0, 2230)
Mini PCIe	2x Full-size Mini PCIe
PCIe	1x PCIe x16
PCI	1x PCI

### Expansion Modules

Occupied One Universal I/O Slot:	
	• 4-port GbE module with Intel® I350 Chipset, RJ-45 or M12 connector (PoE optional)
	• 2-Port RJ45 10GbE with Intel X710 Chipset
	• 4-Port USB with Renesas uPD720201K8 host controller (share PCIe Gen2 x1 bandwidth)
	• 1x M.2 for 5G (B Key, PCIe x1, USB 3.0, 3042/3052), Including 2x SIM socket, 1x SIM switch (1x Universal Slot Only)

Card Dimension	235 (L) x 112 (H) mm
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### 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 ; 6x RS-232/422/485 (internal)
DIO	8 in / 8 out (Isolated)
LAN	2x RJ45
Universal I/O Bracket	2x Universal I/O Bracket (By mini PCIe interface)
USB	6x USB 3.2 Gen 2 (10 Gbps) 3x USB 3.2 Gen 1 (5 Gbps, 1x Internal) 2x USB 2.0 header (internal)

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 4x 4-Pin Power Connector, 1x 4-PIN FAN Connector
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### Operating System

Windows	Windows 10
Linux	Linux kernel

### Power

Power Adapter	Optional AC/DC 24V/5A, 120W Optional AC/DC 24V/9.2A, 220W Optional AC/DC 24V/11.67A, 280W (For GPU/Card Expansion)
Power Mode	AT, ATX
Power Ignition Sensing	Power Ignition Management
Power Supply Voltage	2x Power Input 9~48VDC 12~48VDC for GPU/Card Expansion
Power Connector	5-pin Terminal Block 4-pin Terminal Block for GPU Expansion
Power Protection	OVP (Over Voltage Protection) OCP (Over Current Protection) Reverse Protection

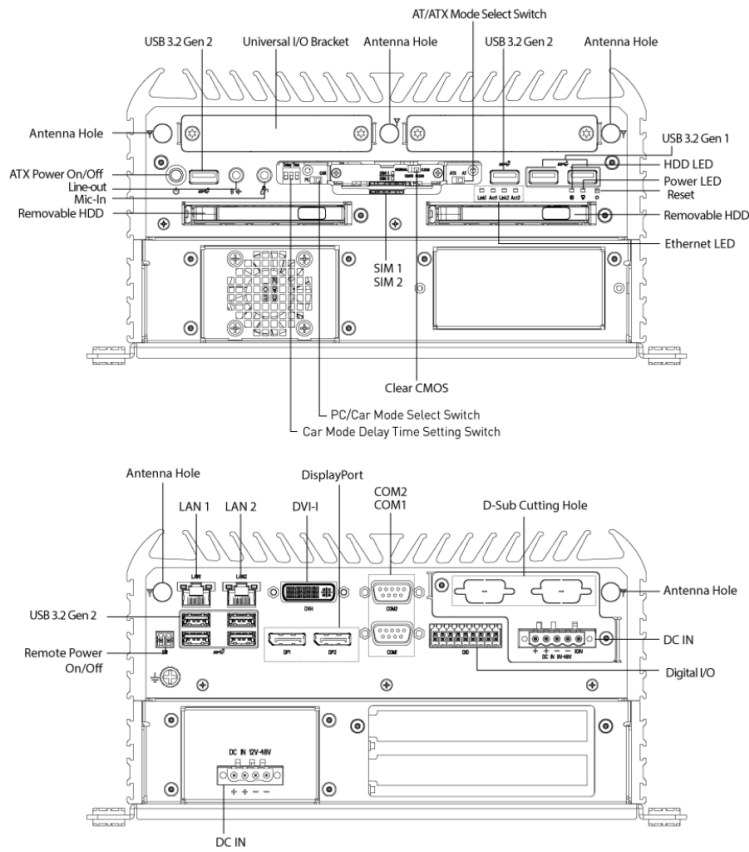
### Environment

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	With SSD: 3 Grms, 5 - 500 Hz, 0.5 hr/axis With HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis
Shock	With SSD: 20G, half sine, 11ms

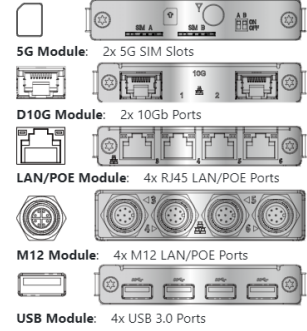
### Physical

Dimensions	240 (W) x 261 (D) x 126.8 (H) mm
Weights	5.6 kg
Construction	Extruded Aluminum with Heavy Duty Metal
Mounting Options	Wall Mounting

## External I/O Mechanical Layout

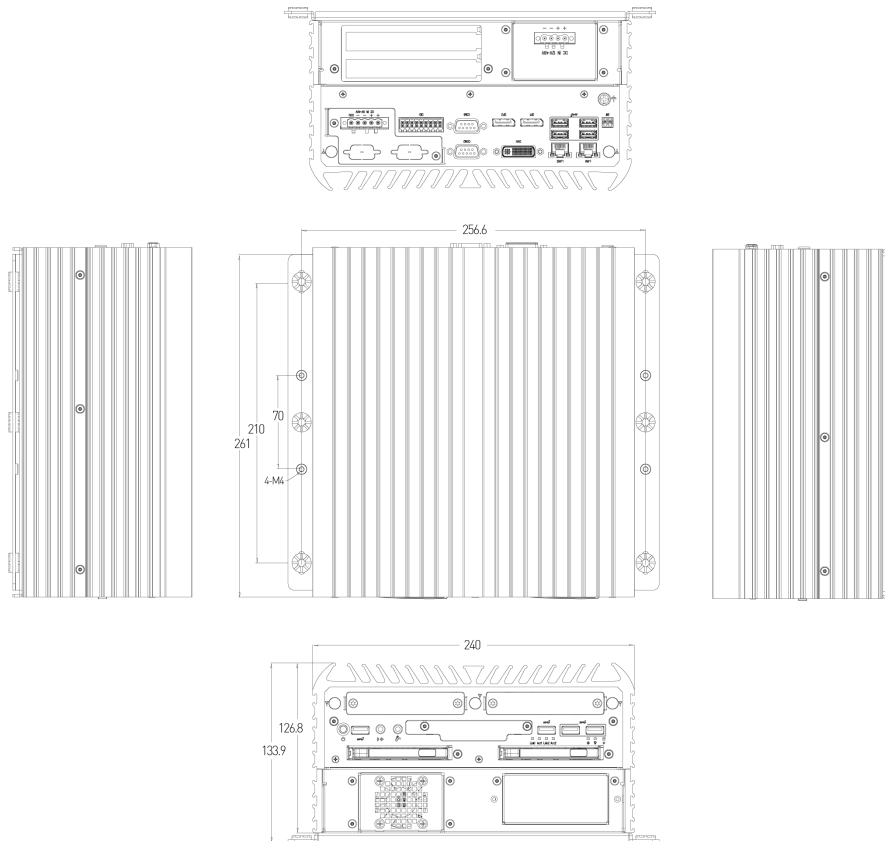


### Available Modules



## Dimension

Unit: mm



### Available Models

Model No.	Description
RCO-6000-CML-2C-2PWR-P	AI Edge Inference Computer w/ LGA 1200 for Intel 10th Gen Processor and W480E PCH, 1x PCIe x16, 1x PCI, 2x Power input

### Optional Accessories

Model No.	Description
1-E09A12002	Adapter AC/DC 24V 5A 120W 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-E09A22801	Adapter AC/DC 24V/11.67A 280W 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-CML 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 2000 ADA	16G	2816	70	4x mDP	PCIe 4.0 x8	Yes	2
NVIDIA RTX 4000 SFF	20G	6144	70	4x mDP	PCIe 4.0 x16	Yes	2

### Compliances and Standards

Shock	With SSD: 20G, half sine, 11ms IEC60068-2-27:2008 Designed to comply with MIL-STD-810G Method 516.7 Procedure I
Vibration	With SSD: 3 Grms, 5 - 500 Hz, 0.5 hr/axis With HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis IEC60068-2-64:2008 Designed to comply with MIL-STD-810G Method 514.7 Procedure I
Operating Temperature	-25°C to 70°C (35W CPU) IEC60068-2-1:2007 (Cold test procedure) IEC60068-2-2:2007 (Dry heat test procedure) IEC60068-2-3:2007 (Damp heat, steady state, test procedure) IEC60068-2-14:2009 (Wide temperature range thermal shock)
EMI	<ul style="list-style-type: none"> <li>FCC Class A (47 CFR part 15.109 and part 15.107)</li> <li>CE</li> <li>ICES-003</li> <li>UKCA</li> </ul>
Safety	<ul style="list-style-type: none"> <li>UL Safety: UL62368-1, 3rd Ed., (cULus)</li> <li>Test procedure: CB Scheme</li> <li>Standard: IEC 62368-1:2018</li> </ul>

### Exports And Tariff Codes

ECCN	5A992.c
HTS	8471.50.0150
ScheduleB	84.71