



INDUSTRIAL COMPUTER

BCO-6000-RPL

Industrial Computer with 12th/13th Gen Intel® IoTG Processor, 2x DP, 1x HDMI, 2x COM, 3x LAN, 1x PCIe x16 (or 2x PCIe x8) Expansion



Features

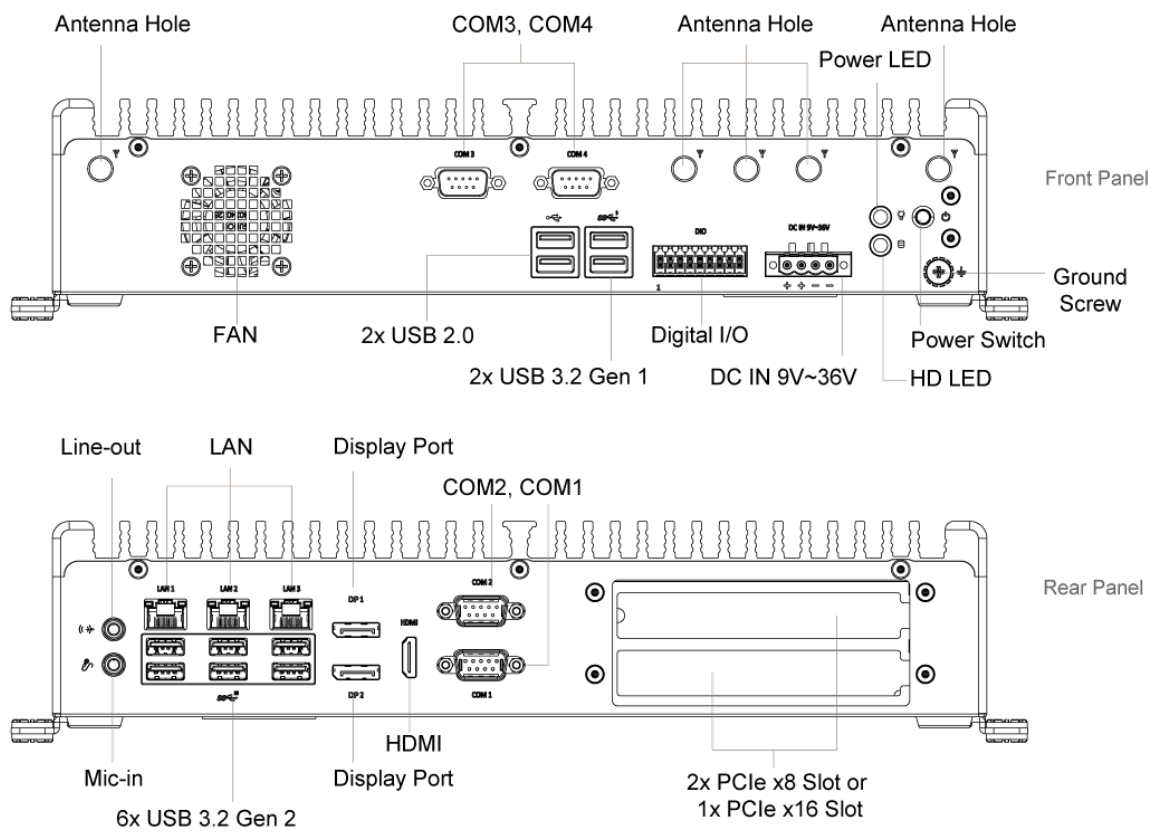
- Support 12th/13th Gen Intel® IoTG Processor Core i9/i7/i5/i3, Pentium, Celeron (35W only)
- 2x DDR4 SODIMM. Max. up to 64GB (Default: 8GB)
- 2x Display Port, 1x HDMI, Triple Independent Display
- 3x 2.5GbE LAN
- 1x M.2 M-Key (Default: 128GB SSD), 1x M.2 E-key, 1x M.2 B-key
- 4x COM, 6x USB 3.2 Gen 2, 2 USB 3.2 Gen 1, x2 USB 2.0
- 1x PCIe x16 Slot (or 2x PCIe x8 Slot)
- 9 to 36VDC Wide Range Power Input Supporting AT/ATX Mode
- Wide Operating Temperature 0°C to 50°C
- TPM 2.0 Supported
- CE, FCC Class A, UL 62368 Ed. 3

Specifications

System	
Processor	Intel® IOTG: • 12th/13th Gen Intel® Core™ Processor i9/i7/i5/i3, Pentium, Celeron (35W only)
System Chipset	Intel® Q670E Express Chipset
LAN Chipset	Intel® I226LM PCIe 2.5GbE LAN Intel® I226V PCIe 2.5GbE LAN Intel® I226V PCIe 2.5GbE LAN
Audio Codec	Realtek ALC897
System Memory	2x DDR4 3200MT/s SODIMM. Max. up to 64 GB (Default: 8GB & Non- ECC supported)
Graphics	• Intel® UHD Graphics • GPU Graphics
BIOS	AMI UEFI BIOS
Watchdog	Software Programmable Supports 1~255 sec. System Reset
AI Accelerator	Supports 1x Hailo-8™ module through M.2 B-Key
TPM	TPM 2.0
Display	
Display Port	2x Dual Mode DisplayPort 1.4a Max Resolution 4096 x 2304 @60Hz
HDMI	1x HDMI 1.4b Max Resolution 4096 x 2304 @24Hz
Multiple Display	3x Independent Displays
Storage	
M.2 M-Key	1x M.2 M-key Type (2242/2280): • Support 1x PCIe x4 Gen 3 NVMe SSD From PCH (Default 128GB SSD) • Support B+M Key, AI/Storage Module (Pending)
Expansion	
M.2 B-Key	1x M.2 B-key (3042) • Support 1x Nano SIM Holder • Support 1x PCIe x1, 1x USB 3.2 Gen 2, 1x USB 2.0, 5G/4G/LTE Module
M.2 E-Key	1x M.2 E key (2230) • Support 1x PCIe x1, 1x USB 2.0; Support CNVi • Devices Supported: Intel® AX210 Wi-Fi 6E & BT-5.1 (vPro Supported)
PCIe	Optional: • 2x PCIe x8 or • 1x PCIe x16 (RTX 2000/4000 support, 70W)
Network Modules	Optional Through M.2 B-Key: • 5G/4G/LTE Module
I/O	
Audio	Line-out/Mic-in
COM	4x DB9 COM1: RS232/422/485 COM2: RS232/422/485 COM3: RS232 COM4: RS232
DIO	8 in / 8 out (Isolated)
LAN	3x RJ45 (2.5GbE)
USB	6x USB 3.2 Gen2 2x USB 3.2 Gen1 2x USB 2.0 Type-A
Others	• 5x Antenna Holes • 1x Power button • 1x HD LED • 1x Power LED • 1x Default Industrial Fan

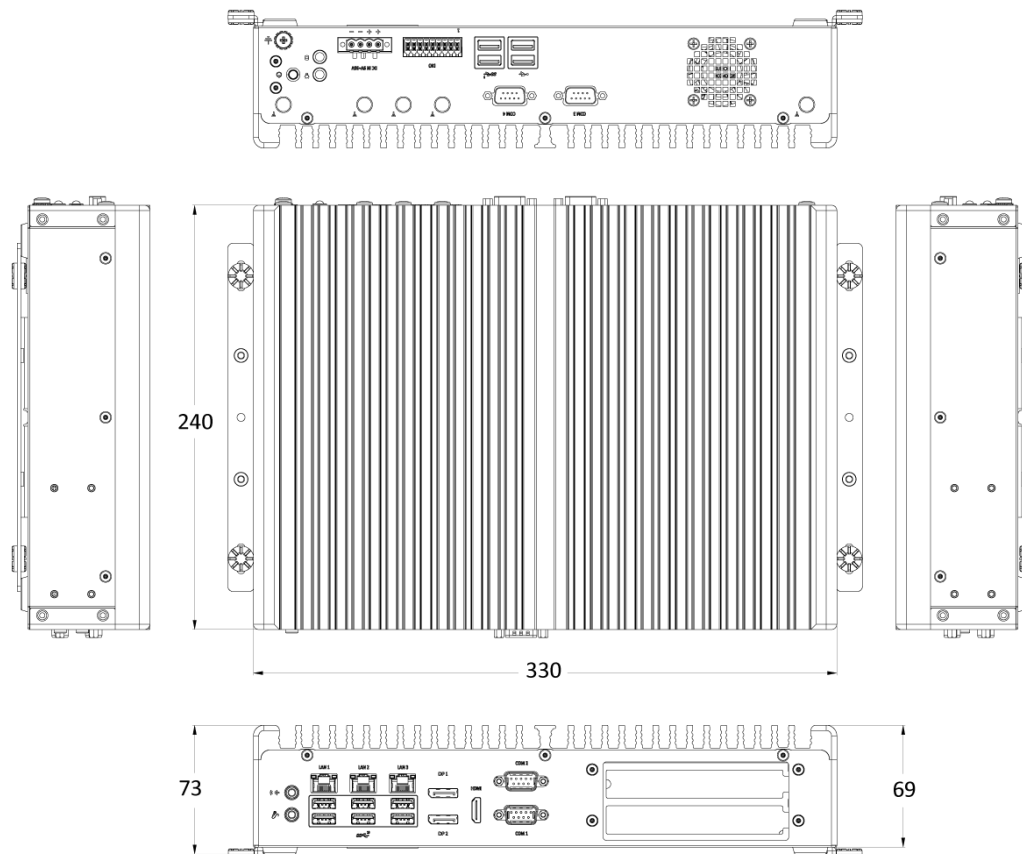
Operating System	
Windows	Windows 10/11
Linux	Linux Kernel
Power	
Power Adapter	Optional AC/DC 24V/9.2A, 220W for CPU and GPU Expansion
Power Mode	AT, ATX (Default ATX)
Power Supply Voltage	9~36VDC
Power Connector	4-pin Terminal Block
Environment	
Operating Temperature	0°C to 50°C (35W CPU)
Storage Temperature	-30°C to 85°C
Relative Humidity	10% to 95% (non-condensing)
Certification	UL 62368 Ed. 3, CE, FCC Class A
Vibration	With SSD: 5 Grms (5 - 500 Hz, 0.5 hr/axis)
Shock	With SSD: 50G half-sin 11ms
Physical	
Dimensions (WxDxH)	330 x 240 x 69mm
Construction	Extruded Aluminum with Heavy Duty Metal
Mounting Options	Wall Mounting

External I/O Mechanical Layout



Dimension

Unit: mm





Compatible GPU AVL

Model	GPU Memory	Memory Bandwidth	CUDA Cores	Tensor Cores	RT Cores	AI TOPS	Dimensions	Power & Thermal
NVIDIA RTX PRO 4000 Blackwell SFF Edition	24GB GDDR7 ECC	432 GB/s	8,960	280	70	770	2.7" H x 6.6" HHHL, Dual Slot	70 W
NVIDIA RTX PRO 2000 Blackwell	16GB GDDR7 ECC	288 GB/s	4,352	136	34	545	2.7" H x 6.6" L, HHHL Dual Slot	70 W
RTX 4000 SFF Ada Generation	20GB GDDR6 ECC	320 GB/s	6144	192	48	307	2.7" x 6.6" LP DS	70 W
NVIDIA RTX 2000 Ada Generation	16 GB GDDR6 with ECC	224 GB/s	2816	88	22	192	2.7" x 6.6" LP DS	70 W
NVIDIA RTX A1000	8GB GDDR6	192 GB/s	2304	72	18	108	2.7" H x 6.4" LP SS	50 W

Compliances and Standards

Vibration	With SSD: 5 Grms (5 - 500 Hz, 0.5 hr/axis) IEC60068-2-64:2008 Designed to comply with MIL-STD-810H Method 514.8 Procedure I
Shock	With SSD: 50G half-sin 11ms IEC60068-2-27:2008 Designed to comply with MIL-STD-810H Method 516.8 Procedure I
Operating Temperature	0°C to 50°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)
EMC	• FCC Class A • CE • ICES-003 • UKCA • Industrial EMC Compliance - EN 61000-4-2: 2009 - EN IEC 61000-4-3: 2020 - EN 61000-4-4: 2012 - EN 61000-4-5: 2014 +A1: 2017 - EN 61000-4-6: 2014
Safety	• UL Safety: UL62368-1, 3rd Ed., (cULus) • Test prcedure: CB Scheme • Standard: IEC 62368-1:2018

Available Models

Model No.	Description
BCO-6000-RPL-1E16-P	Industrial Computer With 12th/13th Gen Intel® IoTG Processor, 2x DP, 1x HDMI, 2x COM, 3x LAN, 1x PCIe x16 Expansion
BCO-6000-RPL-2E8-P	Industrial Computer With 12th/13th Gen Intel® IoTG Processor, 2x DP, 1x HDMI, 2x COM, 3x LAN, 2x PCIe x8 Expansion

Optional Accessories

Model No.	Description
1-E09A22102	Adapter AC/DC 24V 9.2A 220W with 3pin Terminal Block Plug 5.0mm Pitch
1-TPCD00005	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 BCO-6000-RPL AI EDGE COMPUTER
1x Wall Mount Kit
1x Accessory Kit

US Exports And Tariff Codes

ECCN	5A992.c
HTS	8471.50.0150
ScheduleB	84.71

Premio Inc.

918 Radecki Ct., City of Industry
CA 91748, United States
Toll Free: 800.977.3646

Premio Taiwan Inc.

18F, No.176, Jianyi Road, Zhonghe District,
New Taipei City 235603, Taiwan
Toll Free: 886.2.7731.7888

Email: sales@premioinc.com
Website: <https://premioinc.com>