

GP-3000

Dual GPU Expandable Computer

Key Benefits

- ▶ **High Performance** with 9th/8th Gen Intel® Xeon® and Core™ processors
- ▶ **Dual GPU Expansion** supporting up to two full-length GPU cards through optional expansion boxes
- ▶ **Flexible Connectivity** with five GbE LAN ports, six USB 3.2 ports and modular I/O expansion
- ▶ **Versatile Storage** with four hot-swappable 2.5" SATA bays and M.2 NVMe support
- ▶ **Rugged Reliability** with 9–48 V DC input and MIL-STD-810G shock and vibration testing



Overview

The GP-3000 is a rugged industrial GPU computer designed for demanding edge AI, machine vision and high-performance computing applications. Supporting 9th/8th Gen Intel® Xeon® and Core™ processors, the system offers expansion for up to two full-length GPU cards through optional GPU expansion boxes. Flexible storage, extensive connectivity and modular I/O options enable versatile configurations, while wide-range DC power input, robust construction and multiple mounting options support deployment in challenging industrial environments.

Certifications



Specifications

Model Name	GP-3000
System	
Processor	<ul style="list-style-type: none"> 9th Generation Intel Coffee Lake-R S Series CPU: <ul style="list-style-type: none"> - Intel® Xeon® E-2278GE 8 Cores Up to 4.7 GHz, TDP 80W - Intel® Xeon® E-2278GEL 8 Cores Up to 3.9 GHz, TDP 35W - Intel® Core™ i7-9700E 8 Cores Up to 4.4 GHz, TDP 65W - Intel® Core™ i5-9500E 6 Cores Up to 4.2 GHz, TDP 65W - Intel® Core™ i3-9100E 4 Cores Up to 3.7 GHz, TDP 65W - Intel® Core™ i7-9700TE 8 Cores Up to 3.8 GHz, TDP 35W - Intel® Core™ i5-9500TE 6 Cores Up to 3.6 GHz, TDP 35W - Intel® Core™ i3-9100TE 4 Cores Up to 3.2 GHz, TDP 35W 8th Generation Intel Coffee Lake S Series CPU: <ul style="list-style-type: none"> - Intel® Xeon® E-2176G 6 Cores up to 4.7 GHz, TDP 80W - Intel® Xeon® E-2124G 4 Cores up to 4.5 GHz, TDP 71W - Intel® Core™ i7-8700 6 Cores up to 4.6 GHz, TDP 65W - Intel® Core™ i5-8500 6 Cores, up to 4.1 GHz, TDP 65W - Intel® Core™ i3-8100 4 Cores 3.6 GHz, TDP 65W - Intel® Core™ i7-8700T 6 Cores up to 4.0 GHz, TDP 35W - Intel® Core™ i5-8500T 6 Cores up to 3.5 GHz, TDP 35W - Intel® Core™ i3-8100T 4 Cores 3.1 GHz, TDP 35W - Intel® Pentium® G5400 2 Cores 3.7 GHz, TDP 58W - Intel® Pentium® G5400T 2 Cores 3.1 GHz, TDP 35W - Intel® Celeron® G4900 2 Cores 3.1 GHz, TDP 54W - Intel® Celeron® G4900T 2 Cores 2.9 GHz, TDP 35W
Chipset	<ul style="list-style-type: none"> Intel® C246
BIOS	<ul style="list-style-type: none"> AMI BIOS
Memory	<ul style="list-style-type: none"> 2x DDR4 2666/2400 MHz SO-DIMM Sockets <ul style="list-style-type: none"> * Xeon/i7/i5: Up to DDR4 2666MHz * i3/Pentium/Celeron: Up to DDR4 2400MHz Supports ECC / non-ECC Type Up to 64GB
Graphics	
Graphics Engine	<ul style="list-style-type: none"> Integrated Intel® UHD Graphics (Xeon/i7/i5/i3: UHD 630; Pentium/Celeron: UHD 610) Supports Triple Independent Display (VGA/DisplayPort/HDMI®)
Audio	
Audio Codec	<ul style="list-style-type: none"> Realtek® ALC888, High Definition Audio
I/O	
DisplayPort	<ul style="list-style-type: none"> 1x DisplayPort Connector (4096 x 2304 @ 60Hz, According to CPU Specifications) * Verified maximum resolution: 3840x2160.
HDMI®	<ul style="list-style-type: none"> 1x HDMI® Connector (4096 x 2160 @30Hz)
VGA	<ul style="list-style-type: none"> 1x VGA Connector (1920 x 1200 @30Hz)
LAN	<ul style="list-style-type: none"> 5x GbE LAN, RJ45 <ul style="list-style-type: none"> - GbE1: Intel® I219-LM - GbE2: Intel® I210 - GbE3: Intel® I210 - GbE4: Intel® I210 - GbE5: Intel® I210
COM	<ul style="list-style-type: none"> 2x RS-232/422/485 with Auto Flow Control (Supports 5V/12V), DB9
USB	<ul style="list-style-type: none"> 2x 10Gbps USB 3.2 Gen2, Type A 4x 5Gbps USB 3.2 Gen1, Type A
Line-out	<ul style="list-style-type: none"> 1x Line-out, Phone Jack 3.5mm
Mic-in	<ul style="list-style-type: none"> 1x Mic-in, Phone Jack 3.5mm
Power On/Off Switch Button	<ul style="list-style-type: none"> 1x ATX Power On/Off Button

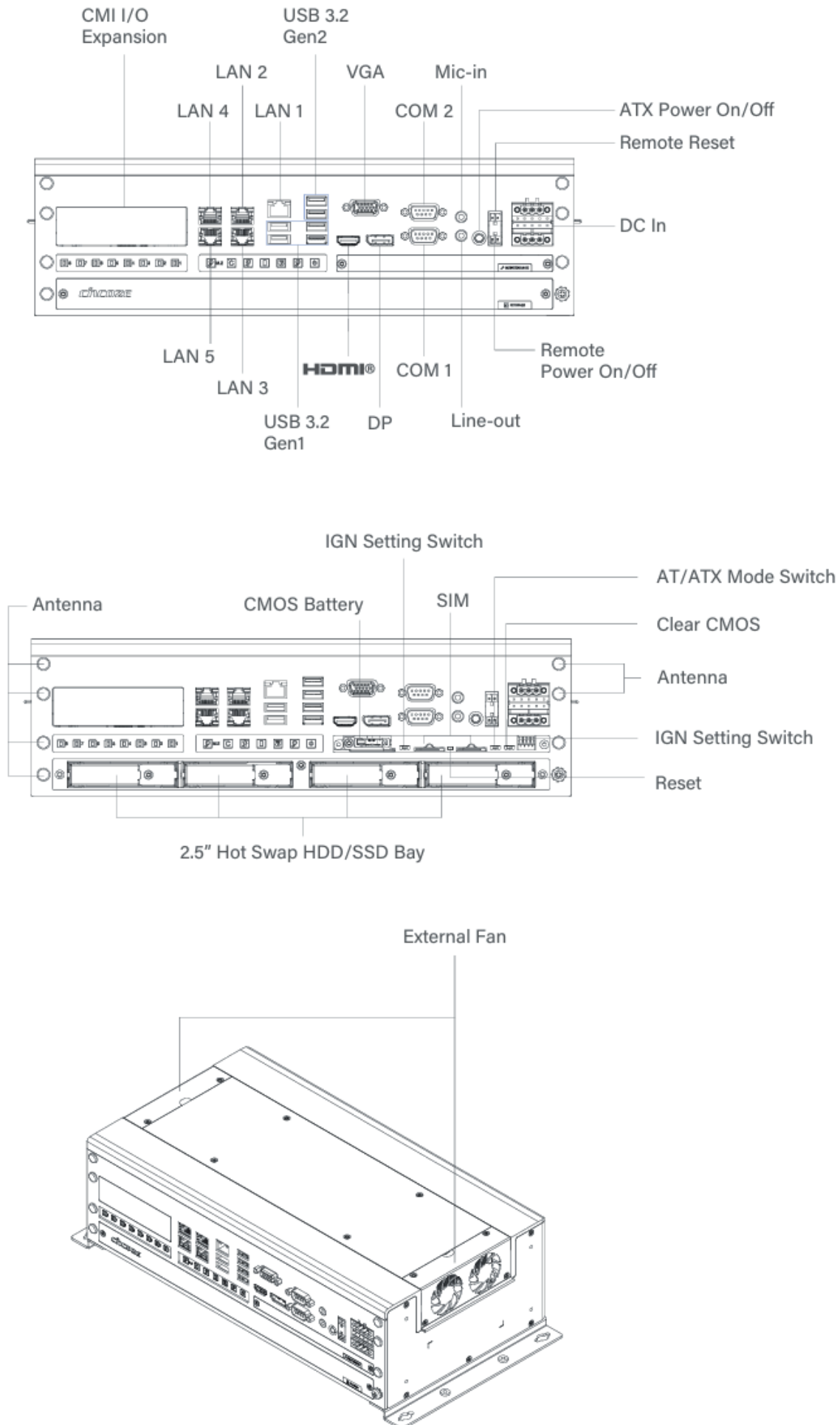
CMOS Switch	• 1x Clear CMOS Switch
Remote Power On/Off Connector	• 1x Remote Power On/Off Connector, 2-Pin Terminal Block
Terminal Block	• 1x Remote Reset, 2-pin Terminal Block
AT/ATX Mode Switch	• 1x AT/ATX Mode Switch
Reset Button	• 1x Reset Button
Storage	
SSD / HDD	• 4x 2.5" Front Accessible SATA HDD/SSD Bay (SATA 3.0), Supports Up to 15mm in Height
M.2	• 1x M.2 Key M 2280 Socket, Supports PCIe x4 NVMe SSD or SATA SSD (Gen3)
RAID	• Supports RAID 0 / 1 / 5 / 10
Expansion	
PCIe	<ul style="list-style-type: none"> • Optional GPU Expansion Box - 1 x PCIe x 16 Slot (PCIe x 16 Signal) for GPU Card + 1 x PCIe x 4 Slot (Max. 25W) - 2 x PCIe x 16 Slot (PCIe x 8 Signal) for GPU Card + 1 x PCIe x 4 Slot (Max. 25W) + 1 x PCIe x 1 Slot (Max. 25W) * Single-GPU configuration: 300 W @ 24 VDC * Dual-GPU configuration: 500 W @ 24 VDC or 600 W @ 48 VDC (each GPU ≤ 300 W) * GPU Card Dimension (W x D x H): 138 x 328 x 64 mm
Mini-PCIe Socket	• 2x Full-size Mini-PCIe Socket
M.2	<ul style="list-style-type: none"> • 1x M.2 Key E 2230 Socket, Supports Intel CNVi Module • 1x M.2 Key M 2280 Socket, Support NVMe/SATA SSD
Universal Bracket	• 1x Universal Bracket
SIM Socket	• 2x SIM Socket
Antenna Holes	• 7x Antenna Holes
CMI (Combined Multiple I/O) Interface	<ul style="list-style-type: none"> • CMI Interface 1 x High Speed CMI (Combined Multiple I/O) Interface 1 x Low Speed CMI (Combined Multiple I/O) Interface • CMI Module Optional Modules: - 4x GbE LAN, RJ45 - 4x GbE LAN, M12 A-Coded - 4x GbE LAN, M12 X-Coded - 2x 10GbE LAN, RJ45 - 2x RS-232/422/485 with Auto Flow Control (Supports 5V/12V), DB9 - 16x Optical Isolated DIO(8DI, 8DO), 2x 10 Pin Terminal Block • 1x CFM IGN Interface - CFM-IGN01: Ignition Sensing Function
CFM (Control Function Module) Interface	<ul style="list-style-type: none"> • CFM Interface 1x CFM(Control Function Module) IGN Interface 1x CFM(Control Function Module) PoE Interface • CFM Module Optional Module - 1x Power Ignition Sensing Module with Delay Time Management and Selectable 12V/24V - 1x PoE Function Module Supports Up to 4x PoE+ with Individual port 25.5W
MEC Module	<ul style="list-style-type: none"> • Optional Modules: - 2x 5Gbps USB 3.2 Gen1, Type A
Other Function	
Fan Kits	• 2x Fan Kits (Air-flow isolated from the electronics)
Instant Reboot	• Support 0.2 sec. Instant Reboot Technology
CMOS Battery	• SuperCap Integrated for CMOS Battery Maintenance-free Operation
WatchDog Timer	• Software Programmable Supports 256 Levels System Reset

Power Requirement																									
Power Type	• AT / ATX																								
Total Power Budget	• 720W @24VDC (with GEB-3601-R10)																								
Power Supply Voltage	• 9~48VDC, Single Power Source																								
Connector Type	• 2x 3-pin Terminal Block, Each Terminal Block Current Limitation is 15A																								
Power Supply	• Optional AC/DC or DC/DC 24V 480W Power Supply • Optional AC/DC or DC/DC 24V 1000W Power Supply																								
Physical																									
Dimension (W x D x H)	• 105 x 195 x 370 mm • 209 x 195 x 370 mm (with GEB-3301) • 305 x 195 x 370 mm (with GEB-3601)																								
Weight	• 8 kg • 11.2 kg (with GEB-3301) • 13.2 kg (with GEB-3601)																								
Construction	• Extruded Aluminum with Heavy Duty Metal																								
Mounting	• Versatile Mounting Methods (Tower Stand / Desktop / 19"Rack / Flat / Wall Mount)																								
Physical Design	• Unibody Chassis • Jumper-less Design																								
Protection																									
Reverse Power Input Protection	• Yes																								
Over Voltage Protection	• Protection Range: 51~58V • Protection Type: shut down operating voltage, re-power on at the preset level to recover																								
Over Current Protection	• 30A																								
Operating System																									
Windows	• Windows® 10																								
Linux	• Supports by Project																								
Environment																									
Operating Temperature	<table><tr><th>CPU \ GPU</th><th>Non-GPU</th><th>1 x 250W GPU</th><th>1 x 300W GPU</th><th>2 x 250W GPU</th></tr><tr><td>35W</td><td>-40°C to 70°C</td><td>-40°C to 40°C</td><td>-40°C to 35°C</td><td>-40°C to 35°C</td></tr><tr><td>65W</td><td>-40°C to 60°C</td><td>-40°C to 40°C</td><td>-40°C to 35°C</td><td>-40°C to 35°C</td></tr><tr><td>80W</td><td>-40°C to 50°C</td><td>-40°C to 40°C</td><td>-40°C to 35°C</td><td>-40°C to 35°C</td></tr></table> <p>* With extended temperature peripherals; Ambient with air flow * According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14 * 100% CPU and GPU without thermal throttling</p>					CPU \ GPU	Non-GPU	1 x 250W GPU	1 x 300W GPU	2 x 250W GPU	35W	-40°C to 70°C	-40°C to 40°C	-40°C to 35°C	-40°C to 35°C	65W	-40°C to 60°C	-40°C to 40°C	-40°C to 35°C	-40°C to 35°C	80W	-40°C to 50°C	-40°C to 40°C	-40°C to 35°C	-40°C to 35°C
CPU \ GPU	Non-GPU	1 x 250W GPU	1 x 300W GPU	2 x 250W GPU																					
35W	-40°C to 70°C	-40°C to 40°C	-40°C to 35°C	-40°C to 35°C																					
65W	-40°C to 60°C	-40°C to 40°C	-40°C to 35°C	-40°C to 35°C																					
80W	-40°C to 50°C	-40°C to 40°C	-40°C to 35°C	-40°C to 35°C																					
Storage Temperature	• -40°C to 85°C																								
Relative Humidity	• 95% RH @ 70°C (Non-condensing)																								
Shock	• MIL-STD-810G																								
Vibration	• MIL-STD-810G																								
MTBF	• 441,283hr																								
Fire Protection	• Fire Protection: EN 45545-2																								

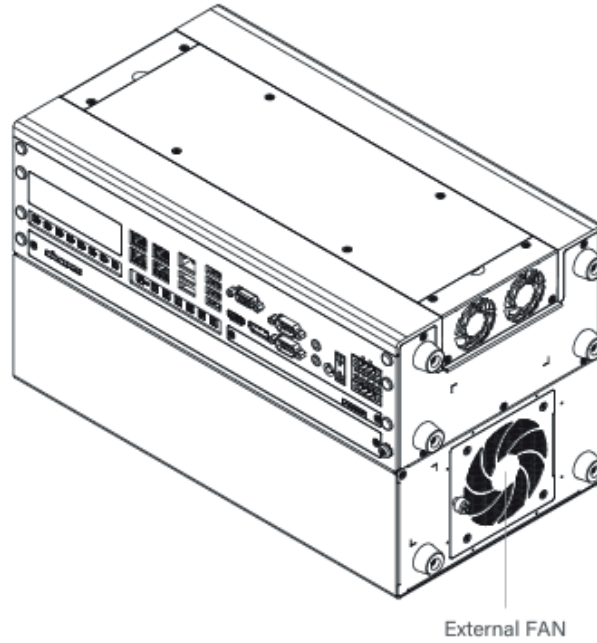
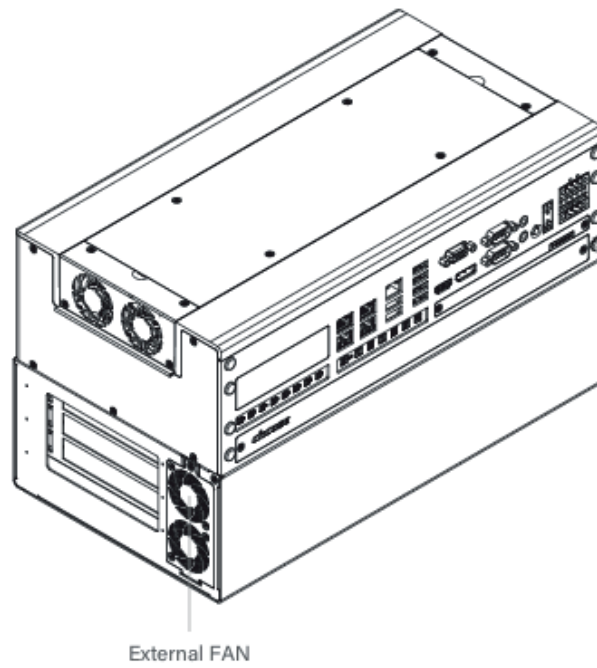
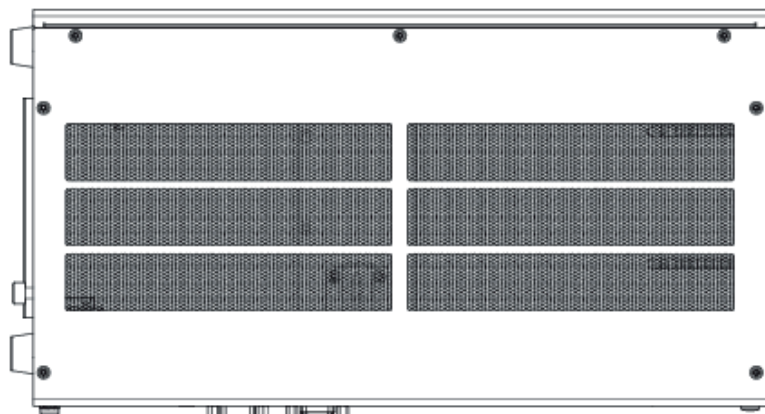
EMC	<ul style="list-style-type: none">• CE, UKCA, FCC, ICES-003 Class A• EN 50155 (EN 50121-3-2 Only)• E-mark
EMI	<ul style="list-style-type: none">• CISPR 32 Conducted & Radiated: Class A• EN/BS EN 50121-3-2 Conducted & Radiated: Class A• EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A• EN/BS EN61000-3-3 Voltage fluctuations & flicker• FCC 47 CFR Part 15B, ICES-003 Conducted & Radiated: Class A
EMS	<ul style="list-style-type: none">• EN/IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV• EN/IEC 61000-4-3 RS: 80 MHz to 1000 MHz: 20 V/m• EN/IEC 61000-4-4 EFT: AC Power: 2 kV; Signal: 2 kV• EN/IEC 61000-4-5 Surges: AC Power: 2 kV• EN/IEC 61000-4-6 CS: 10V• EN/IEC 61000-4-8 PFMF: 50 Hz, 1A/m• EN/IEC 61000-4-11 Voltage Dips & Voltage Interruptions: 0.5 cycles at 50 Hz
Safety	<ul style="list-style-type: none">• LVD IEC/EN 62368-1

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI Trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

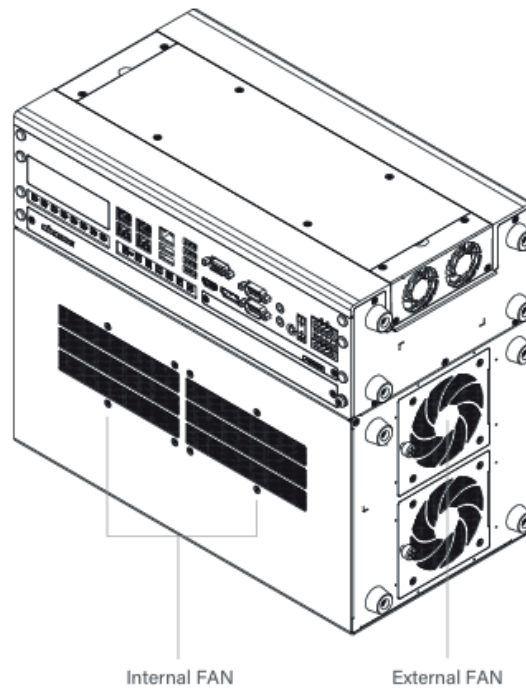
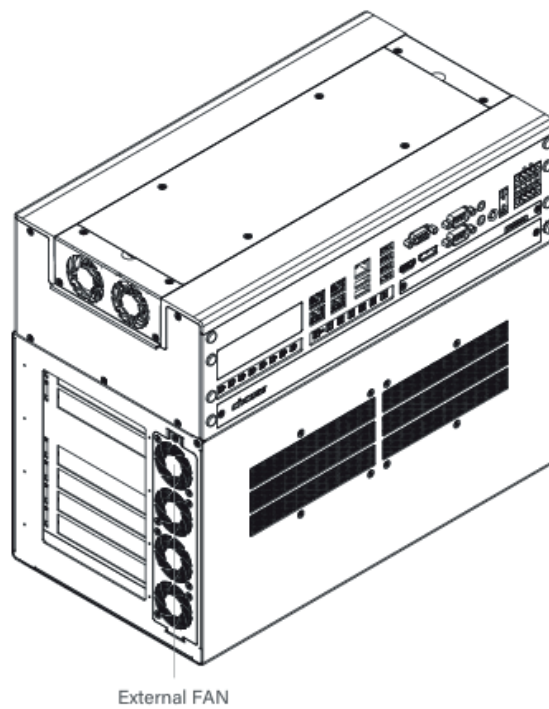
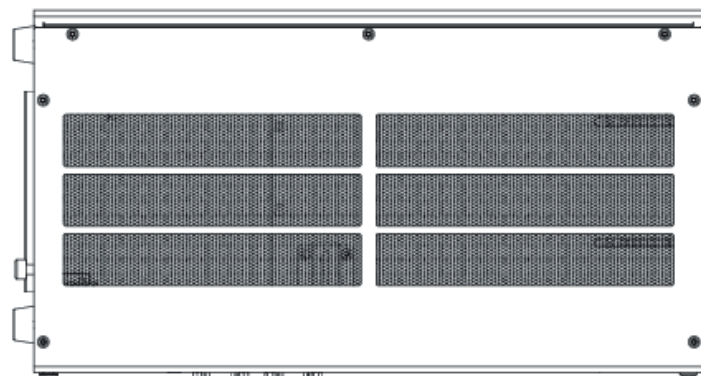
GP-3000 External Layout



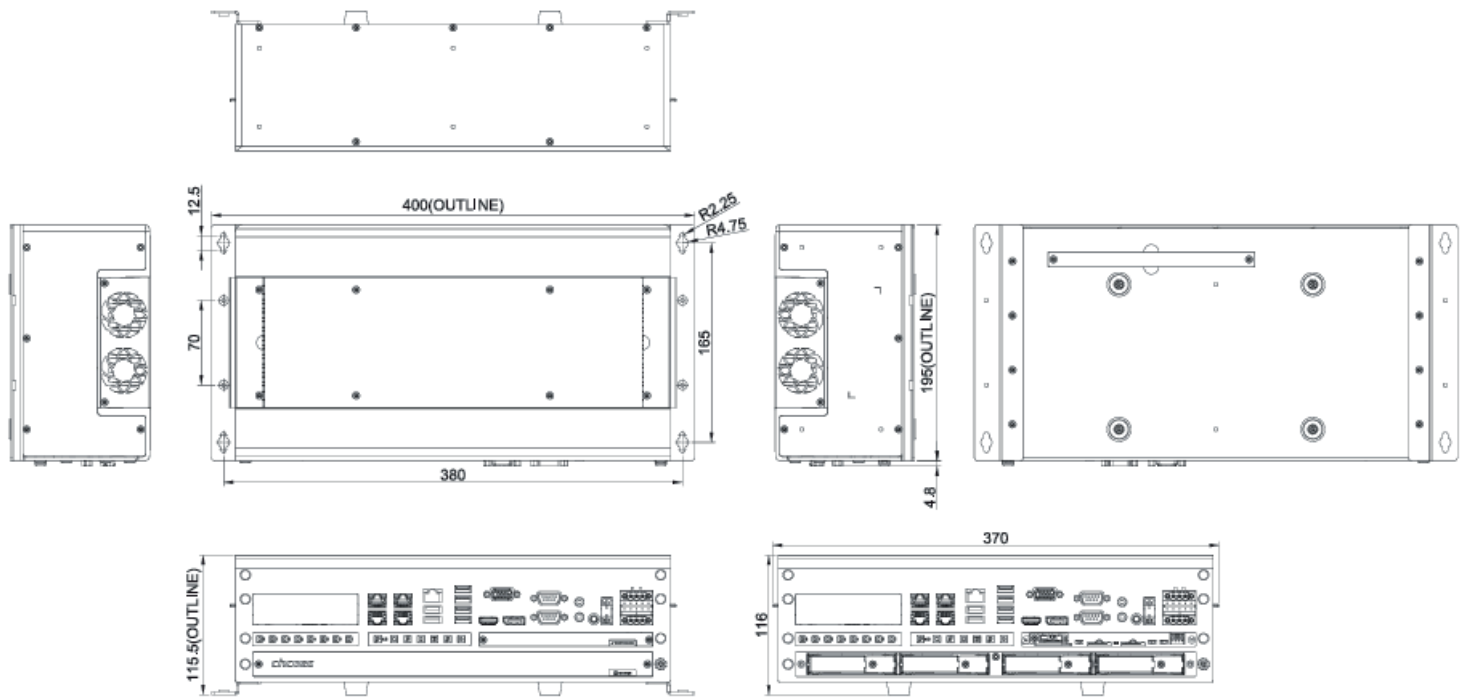
GP-3000/GEB-3301 External Layout



GP-3000/GEB-3601 External Layout

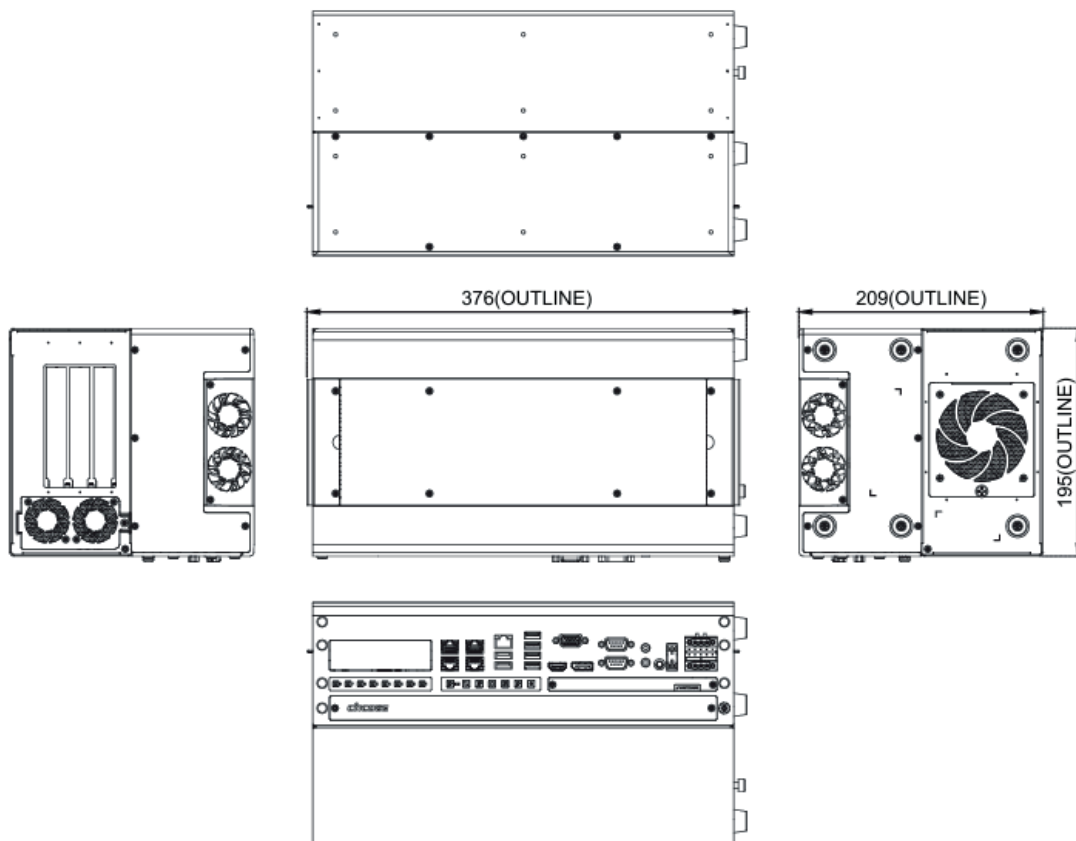


GP-3000 Dimensions



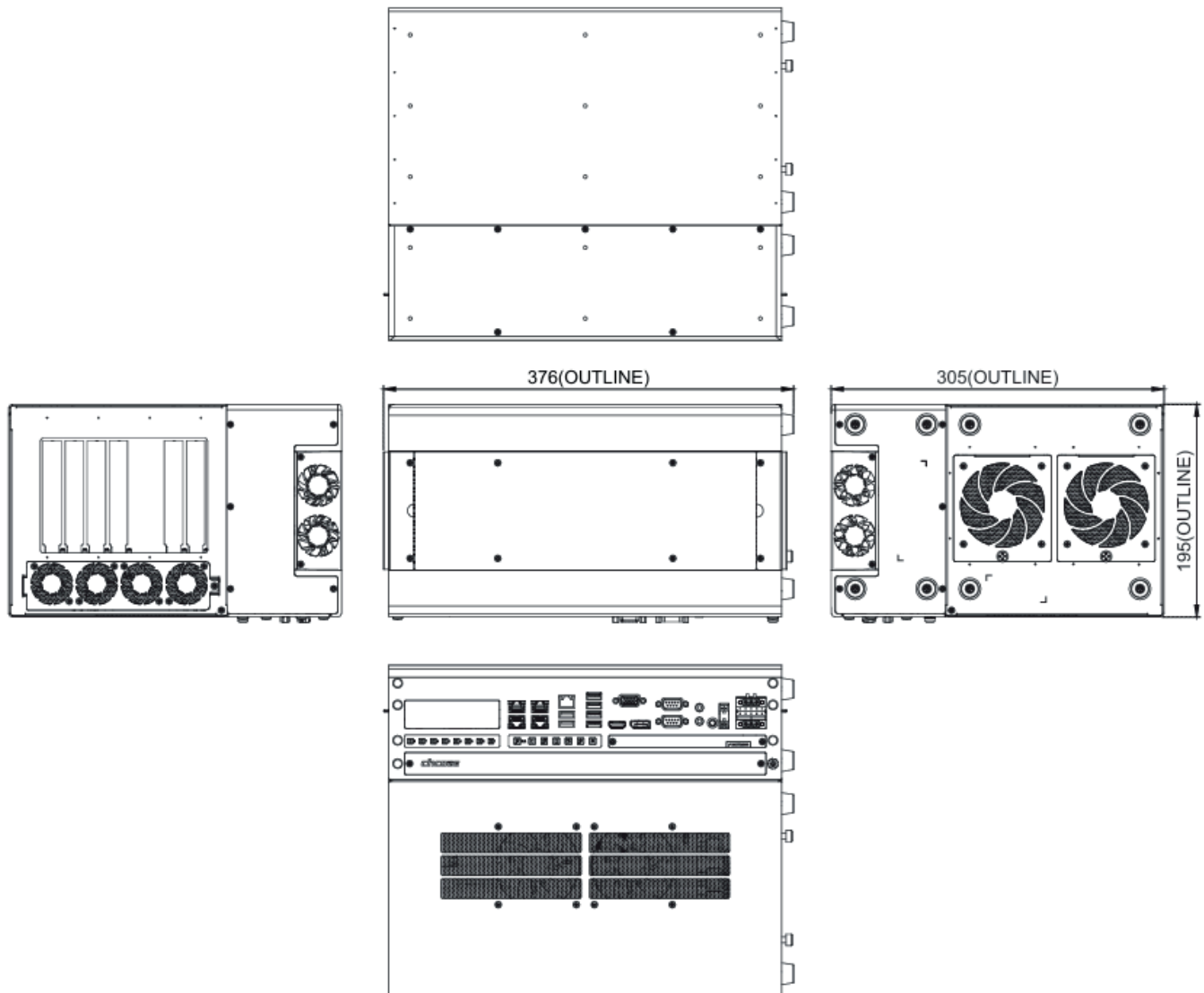
Unit: mm

GP-3000/GEB-3301 Dimensions



Unit: mm

GP-3000/GEB-3601 Dimensions



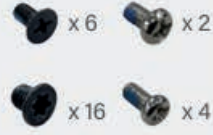
Unit: mm

Ordering Information

Available Models

<p>GP-3000-R10</p> 	<p>9th/8th Gen Intel® Xeon®/Core™ GPU Computer, Supports Dual Full-length GPU Expansion</p>
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Package Checklist

	<p>Wall Mount Bracket</p>
	<p>1 x Desktop Mount Kit</p>
	<p>CPU Heatsink and Thermal Pad Kit</p>
 <p>x 6 x 2 x 16 x 4</p>	<p>4 x Screw Pack</p>
	<p>1 x Rubber Foot Kit</p>
	<p>2 x Power Terminal Block Connector</p>
	<p>2 x Remote Function Terminal Block Connector</p>

Optional Module

Available Models

GEB-3301-R10



GPU Expansion Box with 1x PCIe x16 and 1x PCIe x4 Slots

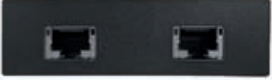
GEB-3601-R10



GPU Expansion Box with 2x PCIe x 16 (Signal PCIe x 8), 1x PCIe x 4 and 1 x PCIe x 1 Slots

Available Models



Model No.	Description
CMI-LAN01-R12/UB1412 	CMI Module with 4x Intel I210 GbE LAN, RJ45 Port / 1x Universal Bracket with 4x RJ45 Cutout for GP-3000 Series
CMI-M12LAN01-R12/UB1410 	CMI Module with M12 A-Coded Connector, 4x Intel I210 GbE LAN / 1x Universal Bracket with 4x M12 Cutout for GP-3000 Series
CMI-XM12LAN01-R10/UB1410 	CMI Module with M12 X-Coded Connector, 4x Intel I210 GbE LAN Ports / Universal Bracket with 4x M12 Cutout for GP-3000 Series
CMI-2P5GLAN02-R10/UB1412 	CMI Module with 4x Intel 2.5GbE LAN, RJ45 Port / 1x Universal Bracket with 4x RJ45 Cutout for GP-3000 Series
CMI-10GLAN02-R10/UB1428 	CMI Module with 2x Intel X550 10GbE LAN, RJ45 Port / 1x Universal Bracket with 2x RJ45 Cutout for GP-3000 Series
CMI-10GXM12LAN02-R10/UB1437-R10 	CMI Module with 2x Intel 10GbE LAN, M12 X-Coded Connector / Universal Bracket with 2x M12 X-coded Cutout
CMI-CAN01-R10/UB1438-R10 	CMI Module with 2x CAN FD Ports / Universal Bracket with 2x DB9 and 1x Switch Cutout for CMI-CAN Expansion
CMI-COM04-R10/UB1403 	CMI Module with 2x RS232/422/485 Ports (Support 5V/12V) / 1x Universal Bracket with 2x DB9 Cutout for GP-3000 Series
CMI-DIO04-R11/UB1418 	CMI Module with 16DIO (8in 8out) / 1x Universal Bracket with DIO Cutout for GP-3000 Series
MEC-USB-M102-30/UB1414 	Mini-PCIe Module with 2x USB 3.2 Gen1 Ports, 1x30 cm cable, 1x Universal Bracket with 2x USB Cutout

Accessories - Function Module

<p>CFM-PoE07-R10</p> 	<p>CFM Module with PoE Function, Individual Port 25.5W (Enable PoE function for CMI-LAN01-R12, CMI-M12LAN01-R12, CMI-XM12LAN01-R10)</p>
<p>CFM-PoE01</p> 	<p>CFM Module with PoE Function, Individual Port 25.5W (Enable PoE function for onboard LAN 2 to LAN 5)</p>
<p>CFM-IGN03-R11</p> 	<p>CFM Module with Power Ignition Sensing Function, 12V/24V Selectable</p>

Mounting Kit

<p>RM01-R10</p> 	<p>19" Rack Mount Kit for GP-3000</p>
<p>RM02-R10</p> 	<p>19" Rack Mount Kit for GP-3000/GEB-33 Series</p>
<p>RM03-R10</p> 	<p>19" Rack Mount Kit for GP-3000/GEB-36 Series</p>

Power Supply / Power Cord / Power Cable

	Adapter AC/DC 24V 9.2A 220W with 3pin Terminal Block Plug and Tubes, Level VI
	Adapter AC/DC 24V 15A 360W with 3pin Terminal Block Plug and TUBES, Level VI
	Railway Single Output DC-DC Converter 200W / DC 24V
	DIN Rail Power Supply 480W 24V, SDR-480-24
	Power Supply 1000W 24V, HEP-1000-24
	1.8M US Power Cord, Stripped and Tinned End with Tube
	1.8M EU Power Cord, Stripped and Tinned End with Tube
	1M Power Cable with 3-Pin Terminal Block Plug, Stripped and Tinned End with Tube

Compatible GPU List

Model	Architecture	Dimesion (D x W mm)	Slot	Power Consumption
RTX PRO 6000 Blackwell Max-Q Workstation Edition	Blackwell	266.7 x 111.8	dual slot	300W
RTX PRO 5000 Blackwell	Blackwell	266.7 x 111.8	dual slot	300W
RTX PRO 4500 Blackwell	Blackwell	241.3 x 111.8	dual slot	200W
RTX PRO 4000 Blackwell	Blackwell	266.7 x 111.8	single slot	140W
RTX PRO 4000 SFF Blackwell	Blackwell	167.6 x 68.6	dual slot	70W
RTX PRO 2000 Blackwell	Blackwell	167.6 x 68.6	dual slot	70W
RTX 6000	Ada Lovelace	266.7 x 111.8	dual slot	300W
RTX 5000	Ada Lovelace	266.7 x 111.8	dual slot	250W
RTX 4500	Ada Lovelace	266.7 x 111.8	dual slot	210W
A800 40GB Active	Ampere	266.7 x 111.8	single slot	130W
RTX A6000	Ampere	266.7 x 111.8	dual slot	70W
RTX A5500	Ampere	266.7 x 111.8	dual slot	230W
RTX A5000	Ampere	266.7 x 111.8	dual slot	230W
RTX A4500	Ampere	266.7 x 111.8	dual slot	200W
RTX A4000	Ampere	241.3 x 111.8	single slot	140W
RTX A2000 RTX A2000 12GB	Ampere	167.6 x 68.6	dual slot	70W

**An optional GPU expansion box is required for GPU usage.



CAPTEC

Delivering end-to-end, like no one else.
Bring us your challenge & experience the difference.

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