

# SE-5010 Series

## High-Performance GPU Computer

### with Intel® 14<sup>th</sup>/13<sup>th</sup> / 12<sup>th</sup> LGA1700 Processor



#### Applications

- Edge AI Computing
- Machine Vision
- Factory Automation
- Image Processing
- Network Communications

#### Features

- Supports 14<sup>th</sup>/13<sup>th</sup>/12<sup>th</sup> Gen Intel® LGA 1700 Processors
- 2 x Intel® 2.5GbE supporting Wake-on-LAN and PXE
- 2 x DDR5 4800/5600MHz SO-DIMM, Max to 64GB
- Quad Display: 3 x DisplayPort, 1 x VGA
- Multiple Storage Capability (M.2, SATA SSD)
- Modular Expandable PCIe Slot Box
- 700W DC Power Module supports GPU

#### Ordering Information

Part No.	Description
SE-5010	Intel® 14 <sup>th</sup> /13 <sup>th</sup> /12 <sup>th</sup> Core™ i LGA1700 CPU, R680E Fanless Box PC with 8 x USB3.2, 6 x RS232/422/485, 2 x 2.5GbE, 1 x VGA, 3 x DP, 3 x Flexible I/O Window Slot, 2 x Internal 2.5" SATA SSD, 2 x DC 9~48V, Terminal Block Connector
SE-5012E	Intel® 14 <sup>th</sup> /13 <sup>th</sup> /12 <sup>th</sup> Core™ i LGA1700 CPU, R680E Fanless Box PC with 8 x USB3.2, 6 x RS232/422/485, 2 x 2.5GbE, 1 x VGA, 3 x DP, 3 x Flexible I/O Window Slot, 2 x Internal 2.5" SATA SSD, 2 x DC 9~48V, Terminal Block Connector, Expansion Box of 2 Slot with 1 x PCIe x16 Slot
SE-5014E	Intel® 14 <sup>th</sup> /13 <sup>th</sup> /12 <sup>th</sup> Core™ i LGA1700 CPU, R680E Fanless Box PC with 8 x USB3.2, 6 x RS232/422/485, 2 x 2.5GbE, 1 x VGA, 3 x DP, 3 x Flexible I/O Window Slot, 2 x Internal 2.5" SATA SSD, 2 x DC 9~48V, Terminal Block Connector, Expansion Box of 4 Slot with 1 x PCIe x16 Slot, 2 x PCIe x8 Slot (4-lane)

#### Packing List

Description
1 x SE-5010 Series
1 x Wall Mount Kit

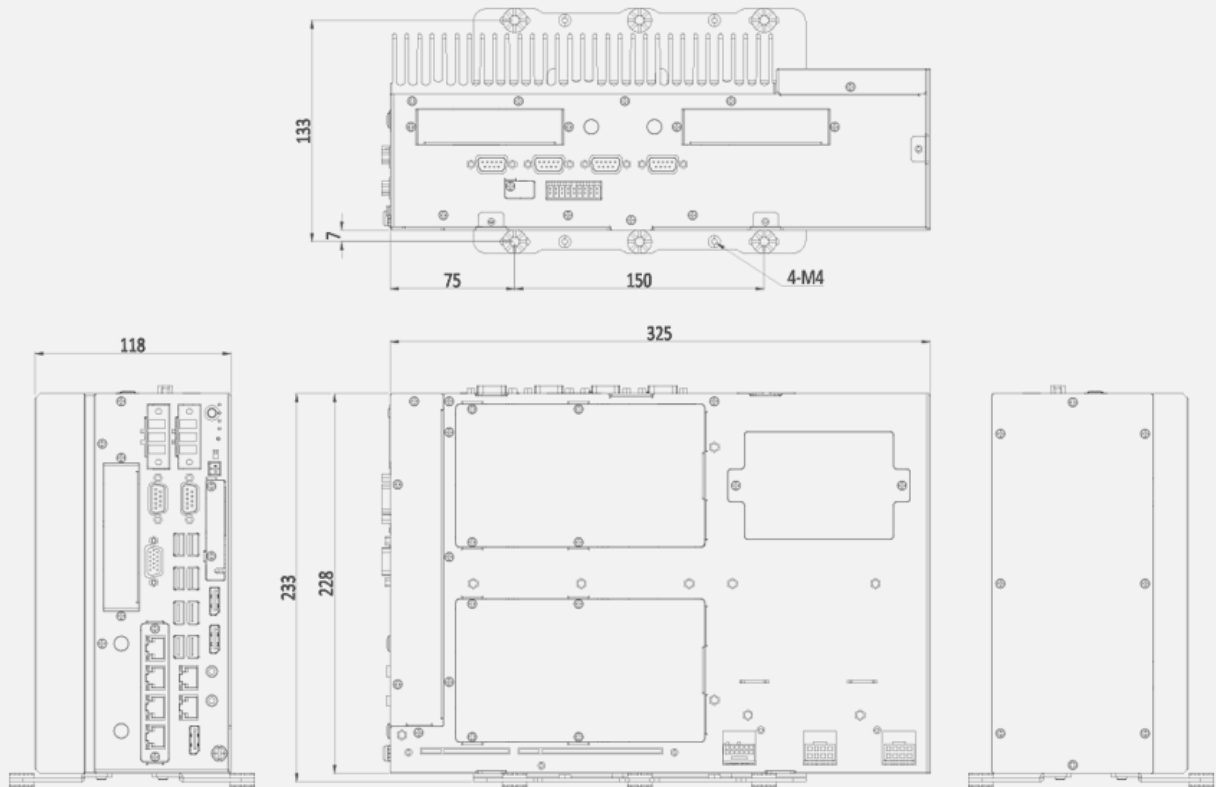
## Optional Items

Part No.	Description
i7-14700T	Intel® 14 <sup>th</sup> Gen Core™ i7-14700T Raptor Lake Refresh_30M Cache, up to 5.00GHz_35W
i5-14500T	Intel® 14 <sup>th</sup> Gen Core™ i5-14500T Raptor Lake Refresh 24M Cache, up to 4.80GHz 35W
i3-14100T	Intel® 14 <sup>th</sup> Gen Core™ i3-14100T Raptor Lake Refresh 12M Cache, up to 4.40GHz 35W
i9-13900TE	Intel® 13 <sup>th</sup> Gen Core™ i9-13900TE Embedded_Raptor Lake_36M Cache, up to 5.00 GHz_35W
i7-13700TE	Intel® 13 <sup>th</sup> Gen Core™ i7-13700TE Embedded_Raptor Lake_30M Cache, up to 4.80 GHz_35W
i5-13500TE	Intel® 13 <sup>th</sup> Gen Core™ i5-13500TE Embedded_Raptor Lake_24M Cache, up to 4.50 GHz_35W
i3-13100TE	Intel® 13 <sup>th</sup> Gen Core™ i3-13100TE Embedded_Raptor Lake_12M Cache, up to 4.10 GHz_35W
i9-12900TE	Intel® 12 <sup>th</sup> Gen Core™ i9-12900TE Embedded_Alder Lake_30M Cache, up to 4.80 GHz_35W
i7-12700TE	Intel® 12 <sup>th</sup> Gen Core™ i7-12700TE Embedded_Alder Lake_25M Cache, up to 4.60 GHz_35W
i5-12500TE	Intel® 12 <sup>th</sup> Gen Core™ i5-12500TE Embedded_Alder Lake_18M Cache, up to 4.30 GHz_35W
i3-12100TE	Intel® 12 <sup>th</sup> Gen Core™ i3-12100TE Embedded_Alder Lake_12M Cache, up to 4.20 GHz_35W
EA-PS-504W24VTB3x-0111	Power Supply 24V/21A 500W with 4 x DC Cables, with 2x3-pin Terminal Block Plug 7.62mm Pitch
EA-PS-1008W48VTB3-0111	Power Supply 48V/21A 1000W with 4 x DC Cables, with 2x3-pin Terminal Block Plug 7.62mm Pitch
30100-0003-CA	Power Cord, 3-pin US Type, 180 cm
30101-0005-CA	Power Cord, 3-pin EU Type, 180 cm

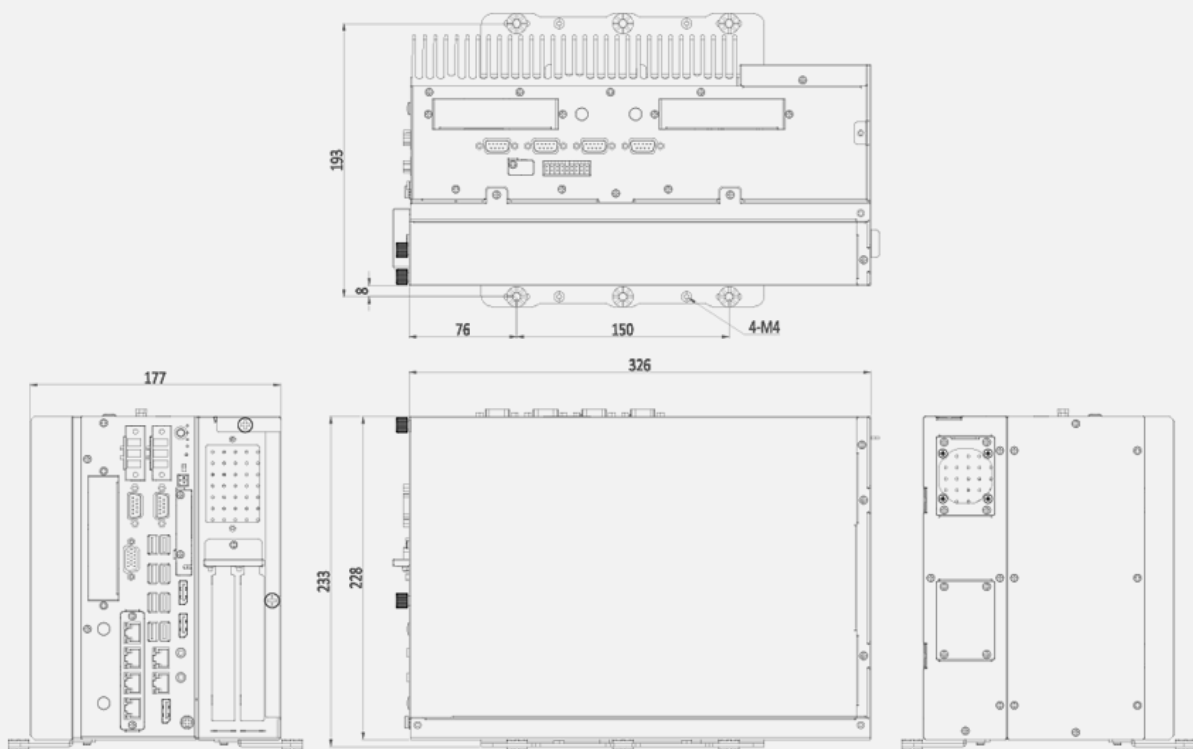
## Specifications

Model		SE-5010	SE-5012E	SE-5014E
Processor System	CPU	14 <sup>th</sup> /13 <sup>th</sup> /12 <sup>th</sup> Gen Intel® Core™/Pentium®/Celeron® 35W LGA 1700 Processors		
	System Chipset	Intel® R680E		
	BIOS	AMI 256Mbit SPI Flash		
	TPM	TPM 2.0		
Memory	Technology	Up to 64GB DDR5 4800/5600 SDRM (ECC and Unbuffered)		
	Type	2 x 262-pin SO-DIMM		
Display	Graphics Engine	Core™ i9/i7/i5: Intel® UHD Graphics 770 Core™ i3: Intel® UHD Graphics 730 Pentium®/Celeron® : Intel® HD Graphics 710		
	Multiple Display	4		
	VGA	1 x VGA, Max Resolution 1920 x 1200		
	DP	3 x DP, Max Resolution 4096 x 2160		
	HDMI	3 x HDMI, Max Resolution 4096 x 2160 (Optional)		
I/O Interface	USB	8 x USB 3.2 (Gen2)		
	Serial Port	6 x RS232/422/485		
	Ethernet	2 x 2.5GbE Intel® i226-IT, RJ45 4 x GbE Intel® i350-AM4 (Optional, via Arestech Flexible I/O Window)		
	PoE	4 x PoE+ Intel® i350-AM4 (Optional, via Arestech Flexible I/O Window)		
	Audio	1 x Line-out, 1 x Mic-in		
	GPIO / DIO	8 x Isolated DI and 8 x Isolated DO, 2 x 9-pin Terminal Block		
	Flexible I/O Window	3		
	Antenna Hole	4		
	CMOS Battery	1 x CMOS Battery and 1 x Clear CMOS Switch		
Storage	2.5" SSD	2 x 2.5" SATA III (6.0Gb/s)		
	M.2	1 x M.2 M-Key1 2280 (SATA) 1 x M.2 M-Key2 2280 (NVMe x4 and SATA)		
	RAID	RAID 0/1/5/10		
Expansion	Mini PCIe	1 x Full-Size Mini-PCIe (PCIe, USB 2.0 and SIM)		
	M.2	1 x M.2 B-Key 2242/3042/3052 (PCIe, USB 3.0 and SIM), 1 x M.2 E-Key 2230 (PCIe, CNVi)		
	PCI/PCIe	N/A	1 x PCIe x16 Slot	1 x PCIe x16 Slot 2 x PCIe x8 Slot (4-lane)
	SIM Holder	2 x Mini-SIM Holder		
Power	Power Mode	AT/ATX		
	Power Supply Voltage	9-48V DC Input with Ignition Control		
	Power Connector Type	2 x DC Power Connector, 1x3-pin Terminal Block		
	Protection	Over Voltage Protection (OVP) up to 52V Reverse Voltage Protection (RVP) up to -48V Over Current Protection (OCP) 20A		
	Car Mode	1 x PC/Car Mode Switch 1 x Delay Time Switch		
Mounting	Type	Wall Mount (Additional Mounting Kit)		
Environment	Operating Temperature	-40 ~70°C		
	Storage Temperature	-40 ~ 80°C		
	Humidity	10% ~ 90% (Non-condensing)		
	Vibration	IEC 60068-2-64: 1Grms, random, 5~500 Hz, 1hr/axis		
	Shock	IEC 60068-2-27: 15G, half-sine, 11ms duration		
	Certification	CE/FCC Class A		
General	Thermal Dissipation	Fanless for 35W CPU	Active Fan for Expansion Box	
	Material	Aluminum & SECC		
	Dimensions (W x D x H)	118 x 325 x 228mm	177 x 325 x 228mm	217 x 325 x 228mm
	Net Weight	7.9kg	8.8kg	9.7kg
	Operating System	Windows 10 IoT, Windows 11 (IoT/Professional), Linux		

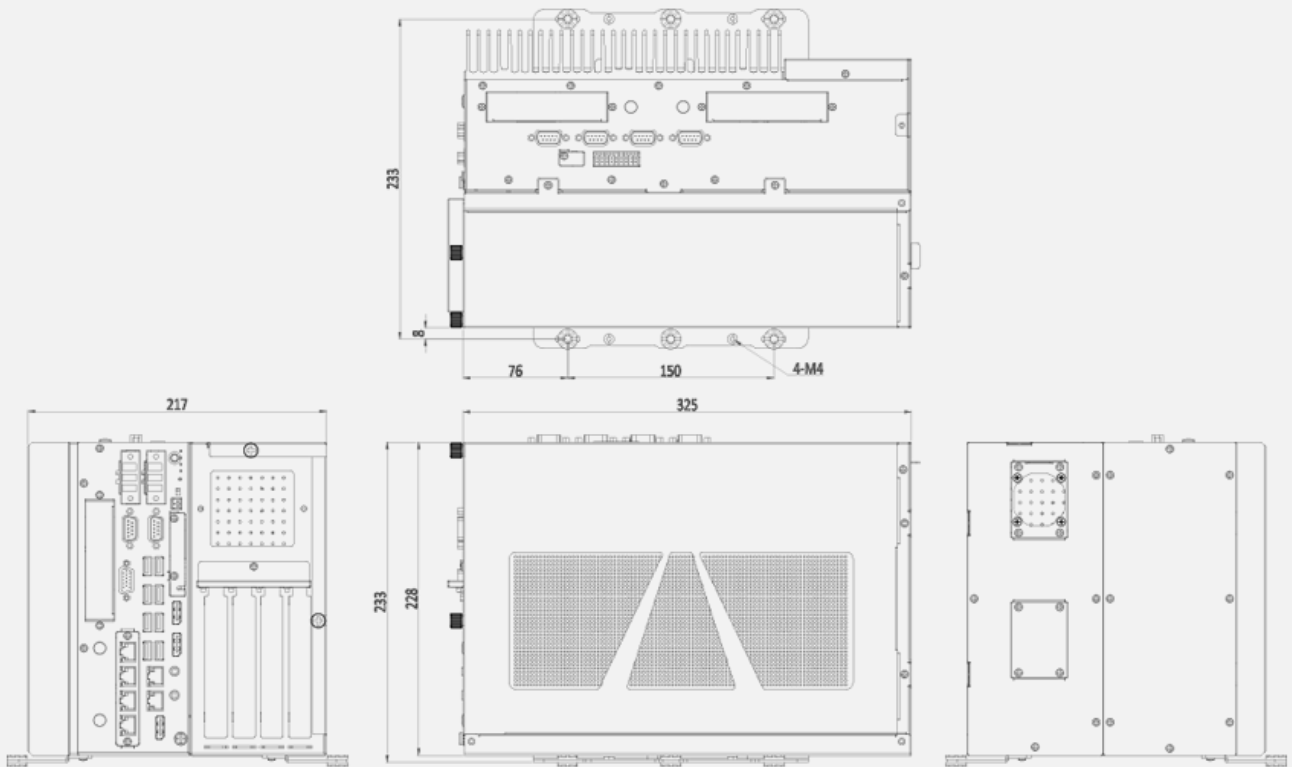
## Dimensions SE-5010



## Dimensions SE-5012E



## Dimensions SE-5014E



## Viewing



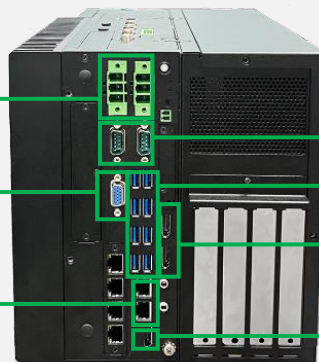
1 x Expansion Box

1 x SE-5010 Series Machine

2 x DC Power Connector,  
1x3-pin Terminal Block

1 x VGA, Max Resolution 1920 x 1200

2 x 2.5GbE Intel® i226-LM, RJ45



6 x RSS232/422/485

8 x USB3.2 (Gen2)

3 x DP, Max Resolution 4096 x2160