

Features:

- Supports Intel® 6th to 9th Gen Core™ i3/i5/i7 Desktop CPU
- Equipped with Intel® Q170 chipset
- 2 DDR4 SO-DIMM slots, supporting up to 64GB
- HDMI, DP, VGA three-way display outputs
- Optional 2/4 Intel® i350 Gigabit Ethernet interfaces with POE function
- Optional 4-channel light source expansion
- Optional 8-channel optically isolated digital input, 8-channel optically isolated digital output expansion
- Optional PCIe x4/ PCI expansion
- Supports WiFi/4G wireless expansion
- Built-in USB 2.0 Type-A for easy dongle installation
- Supports desktop, wall-mounted, DIN rail installation
- 12~28V DC power supply



Remote Management



Status Monitoring



Remote Operations and Maintenance



Security Control

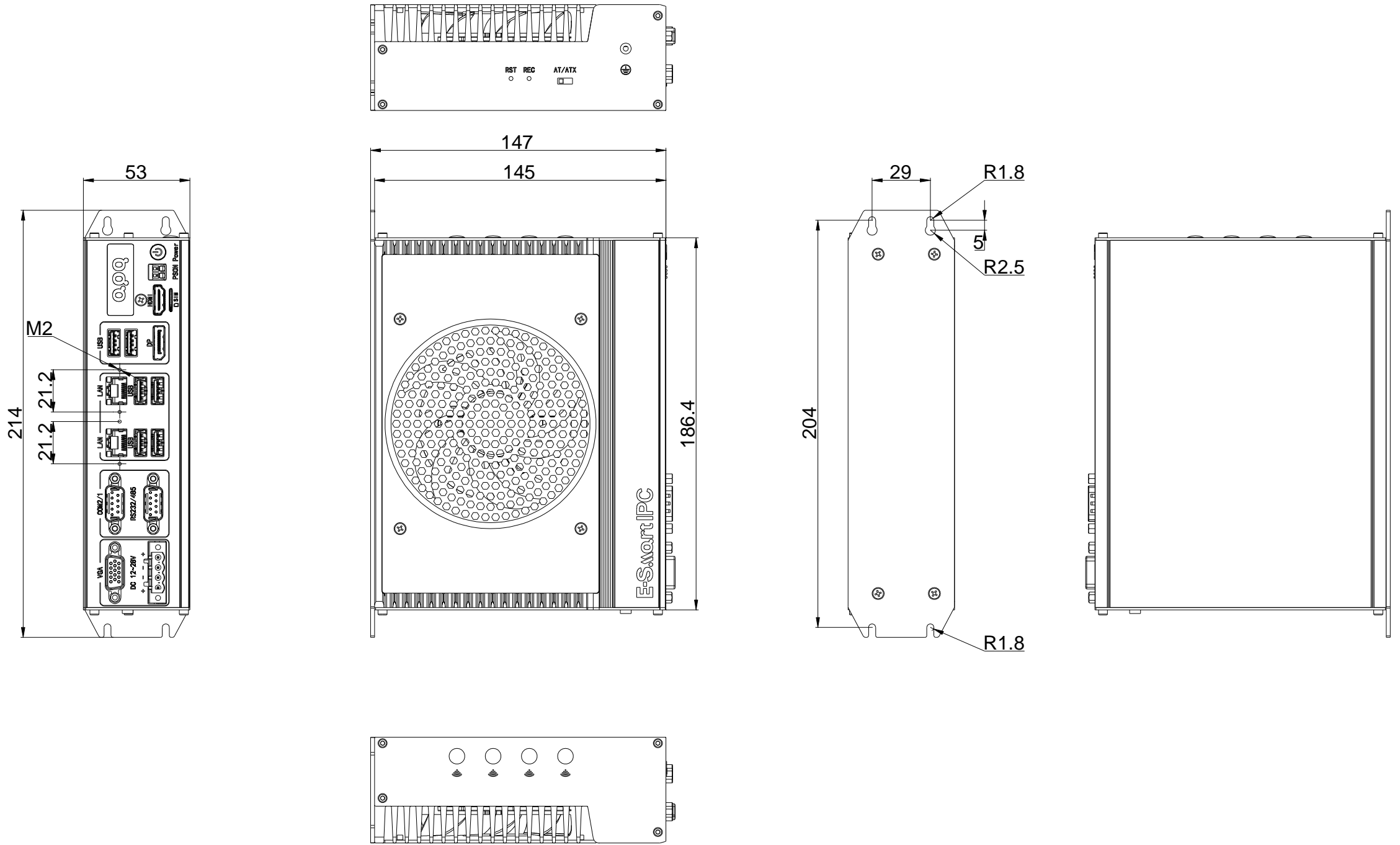
Product Specifications

Model		AK7170	AK7170-1A/1B	AK7170-2A	AK7170-3A
CPU	CPU	Intel® 6~9th Generation Core™ i3/i5/i7 Desktop Processor			
	TDP	65W			
	Socket	LGA1151			
Chipset	Chipset	Intel® Q170			
BIOS	BIOS	AMI UEFI BIOS			
Memory	Socket	2 * SO-DIMM Slot, Dual Channel DDR4 up to 2666MHz			
	Max Capacity	32GB, Single Max. 16GB			
Graphics	Controller	Intel® HD Graphics530/Intel® UHD Graphics 630(Dependent on CPU)			
Ethernet	Controller	1 * Intel® i210-AT GbE LAN Chip (10/100/1000 Mbps) 1 * Intel® i219-LM/V GbE LAN Chip (10/100/1000 Mbps)	1 * Intel® i210-AT GbE LAN Chip (10/100/1000 Mbps) 1 * Intel® i219-LM/V GbE LAN Chip (10/100/1000 Mbps) 1 * Intel® i350 GbE LAN Chip (10/100/1000 Mbps)	1 * Intel® i210-AT GbE LAN Chip (10/100/1000 Mbps) 1 * Intel® i219-LM/V GbE LAN Chip (10/100/1000 Mbps)	1 * Intel® i210-AT GbE LAN Chip (10/100/1000 Mbps) 1 * Intel® i219-LM/V GbE LAN Chip (10/100/1000 Mbps)
		Storage	M.2	1 * M.2 Key-M (PCIe x4 Gen 3 + SATA3.0, NVMe/SATA SSD Auto Detect, 2280) 1 * M.2 Key-M (SATA3.0, 2280)	1 * M.2 Key-M (PCIe x4 Gen 3 + SATA3.0, NVMe/SATA SSD auto detect, 2280) 1 * M.2 Key-M (SATA3.0, 2280)
Expansion Slots	Mini PCIe	1 * Mini PCIe (PCIe x1 Gen 2 + USB 2.0) 1 * Mini PCIe (PCIe x1 Gen 2 + USB 2.0, with SIM card slot)			
	PCIe/PCI	N/A	N/A	1 * PCIe x4	1 * PCI
Front I/O	USB	6 * USB3.0 (Type-A)			
	Serial	2 * RS232/485 (COM1/2, DB9/M, Full lanes, BIOS switch)			
	Display	1 * HDMI: max resolution up to 4096*2304 @ 24Hz 1 * DP: max resolution up to 4096*2160 @ 60Hz 1 * VGA: max resolution up to 1920*1200 @ 60Hz (Optional)			
	LAN/POE	2 * RJ45	2 * RJ45 AK7170-1A: 2 * RJ45, Intel® i350-AM2, optional POE module, 802.3at/af, total 60W AK7170-1B: 4 * RJ45, Intel® i350-AM4, optional POE module, 802.3at/af, total 60W	2 * RJ45	2 * RJ45
	Light Source	N/A	4 * Light Source Output (24V, Max. 1A per channel, PWM control)	N/A	N/A
	GPIO	N/A	1 * 16bits DIO (8xDI, optical isolation; 8xDO, optical isolation)	N/A	N/A
	Power	1 * DC Power Input	1 * DC Power Input	1 * DC Power Input	1 * DC Power Input
	SIM	1 * Nano SIM Card slot (Mini PCIe module provide functional support)			
	Button	1 * Power Button + Power LED 1 * PS_ON Connector			
	Bottom I/O	Switch	1 * AT/ATX Mode Switch (Enable/Disable automatically power on)		
Button		1 * Reset (Hold down 0.2 to 1s to restart, 3s to clear CMOS) 1 * OS Rec (system recovery)			
PCIe/PCI		N/A	N/A	1 * PCIe x4 slot	1 * PCI slot
Power Supply	Type	DC			
	Power Input Voltage	12 ~ 28VDC Note: When using the light source, 24V input must be used.			
	Connector	1 * 4Pin Power Input Connector (P= 5.08mm)			
	RTC Battery	CR2032 Coin Cell			
OS Support	Windows	6/7th Core™: Windows 7/10/11 8/9th Core™: Windows 10/11			
	Linux	Linux			
Watchdog	Output	System Reset			
	Interval	Programmable via Software from 1 to 255 sec			
Mechanical	Enclosure Material	Radiator/Box: Aluminum alloy, Top/Bottom Cover: SGCC			
	Dimensions	53mm(L) * 145mm(W) * 186.4mm(H)	72.9mm(L) * 145mm(W) * 186.4mm(H)	72.9mm(L) * 145mm(W) * 186.4mm(H)	72.9mm(L) * 145mm(W) * 186.4mm(H)
	Mounting	Wall mounted, DIN, Desktop			
Environment	Heat Dissipation System	PWM Air Cooling			
	Operating Temperature	-20~60℃ (Industrial SSD)			
	Storage Temperature	-40~80℃ (Industrial SSD)			
	Relative Humidity	5 to 90% RH (non-condensing)			

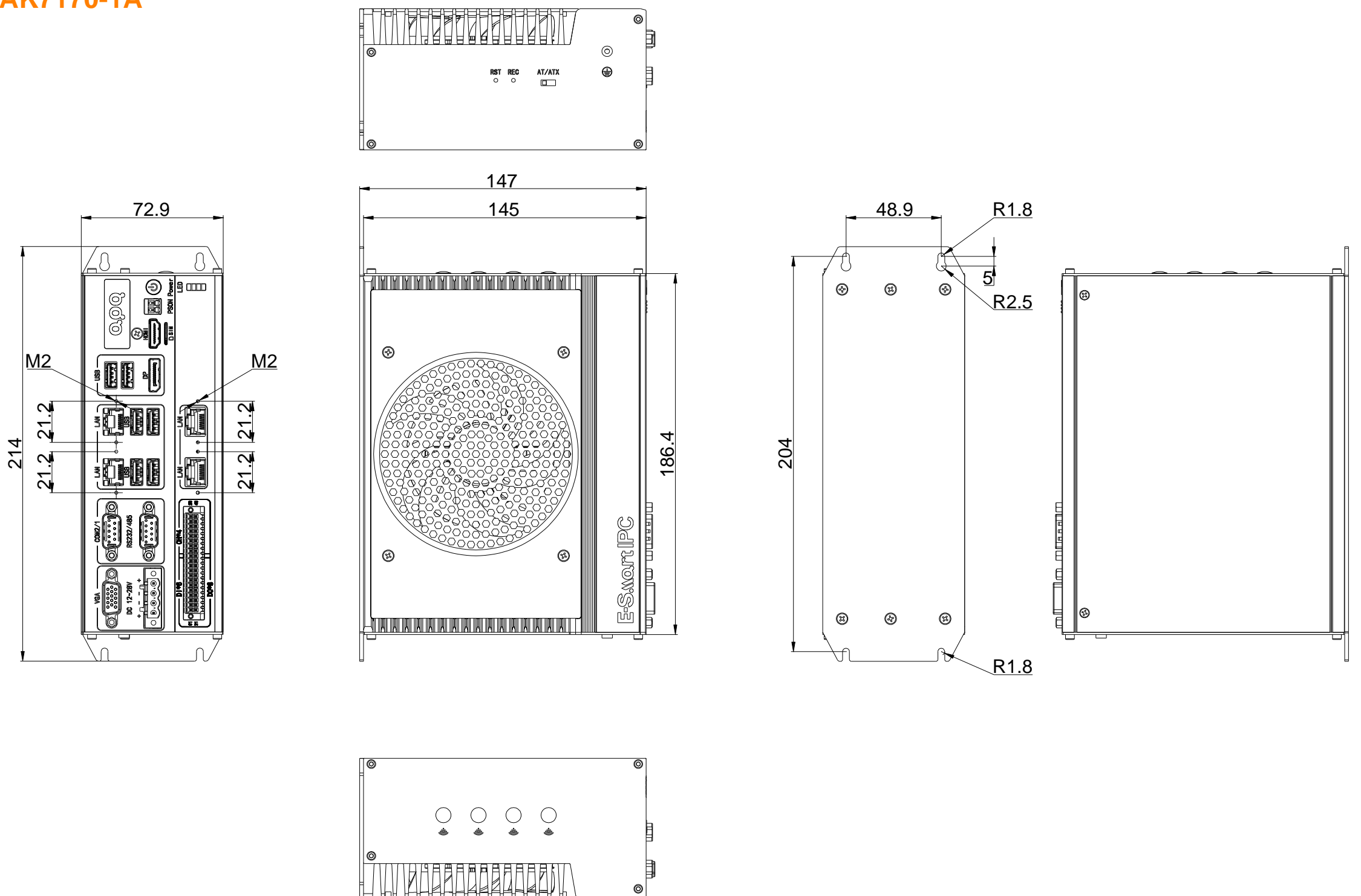
Vibration During Operation	With SSD: IEC 60068-2-64 (3Grms@5-500Hz, random, 1hr/axis)
Shock During Operation	With SSD: IEC 60068-2-27 (30G, half sine, 11ms)

Product Dimensions

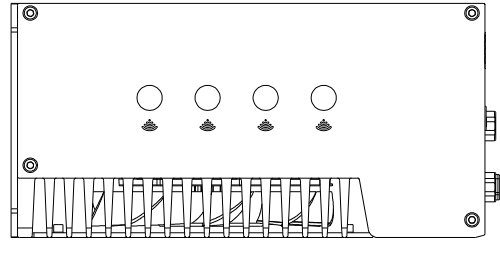
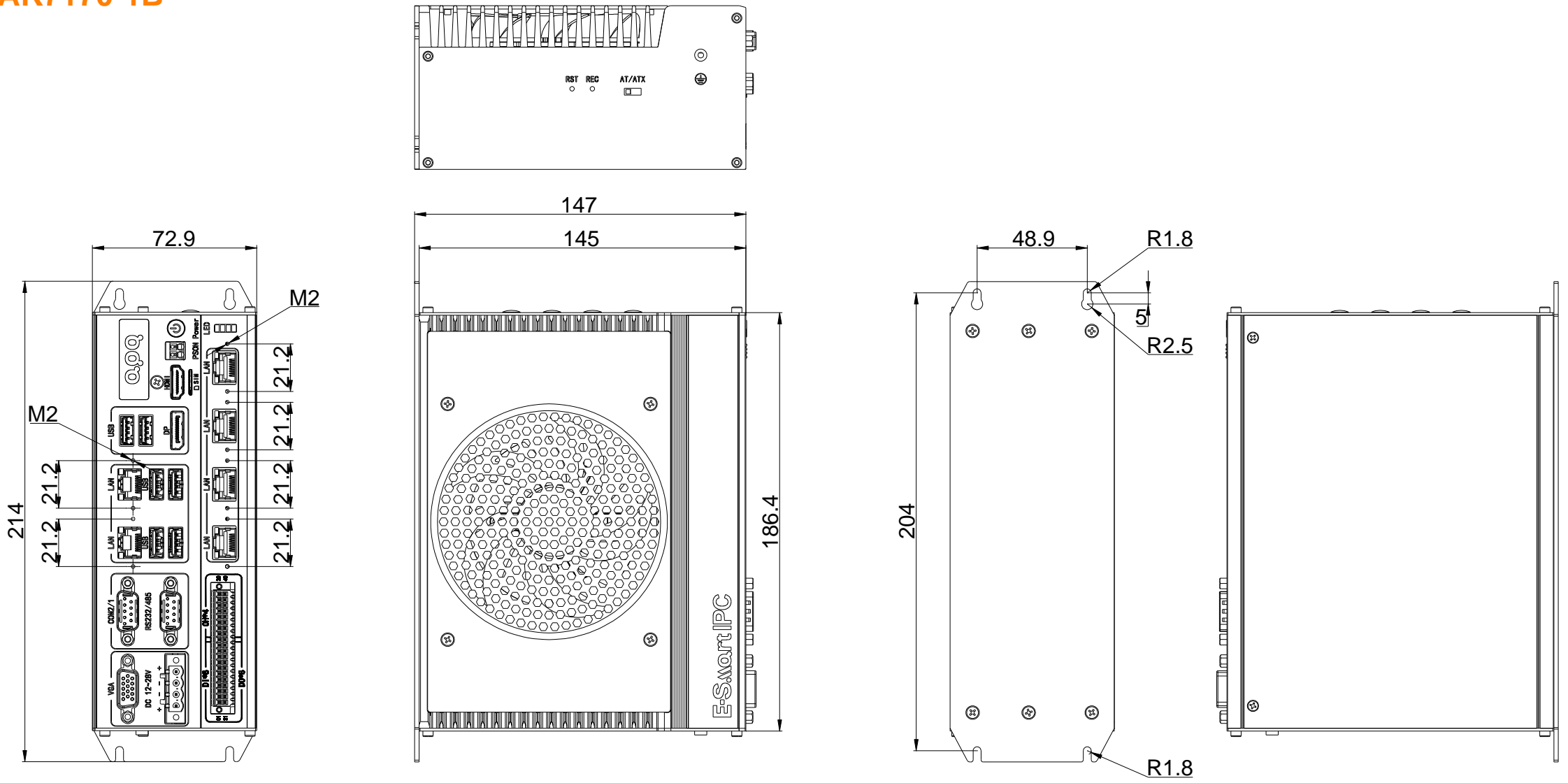
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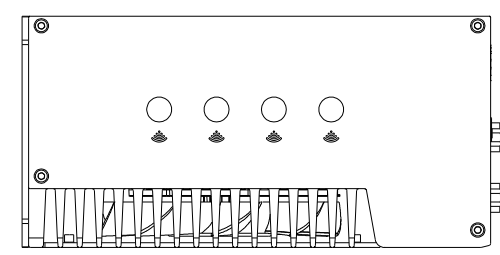
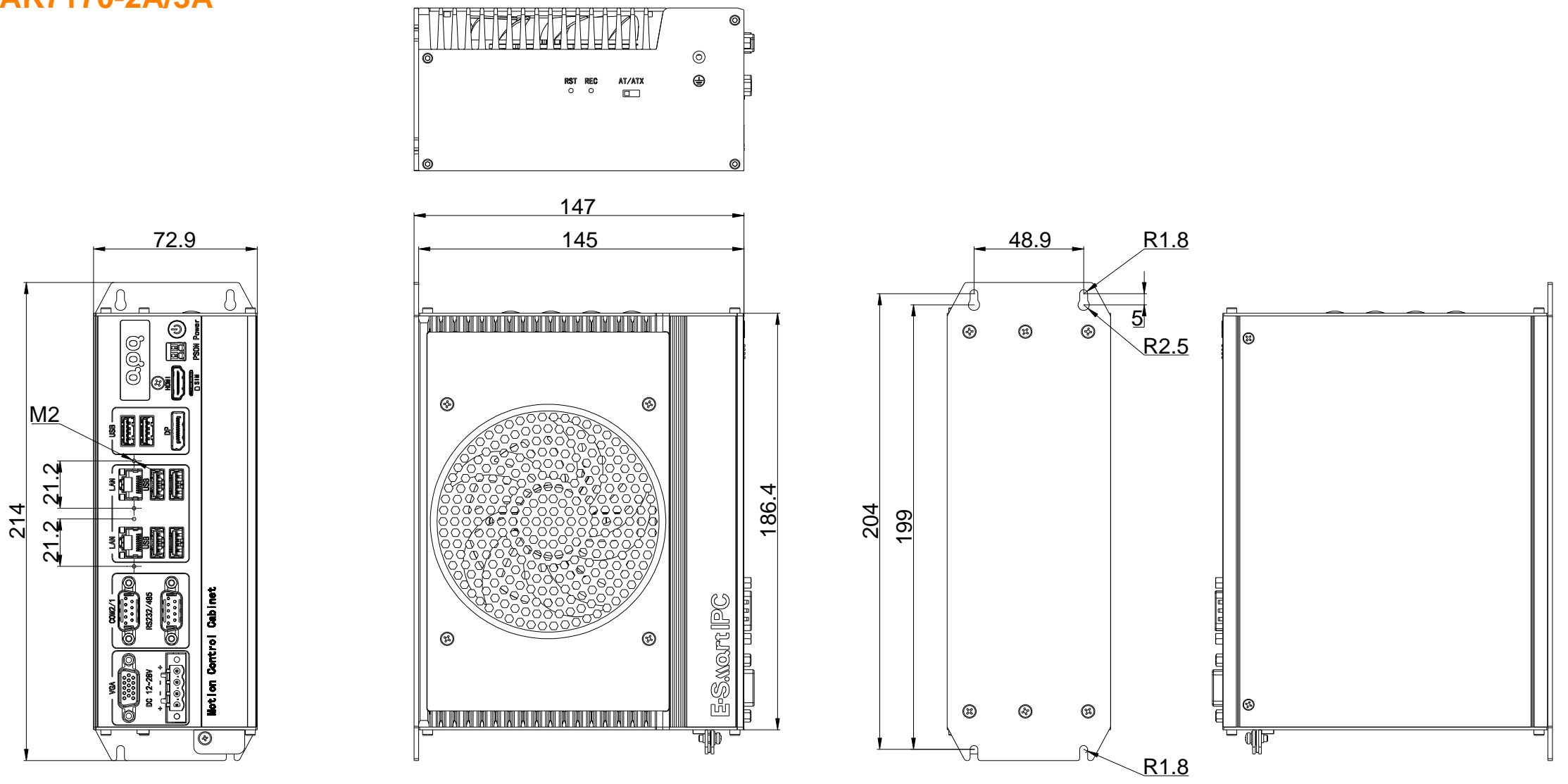
AK7170-1A



AK7170-1B

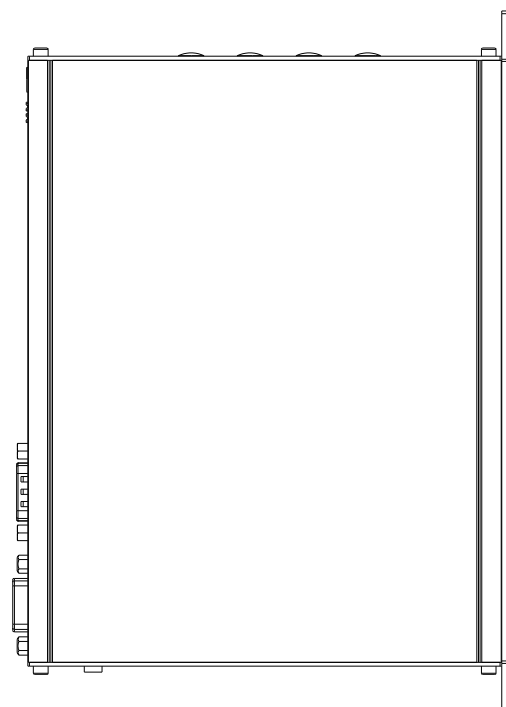
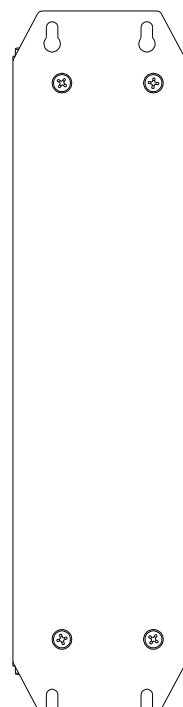
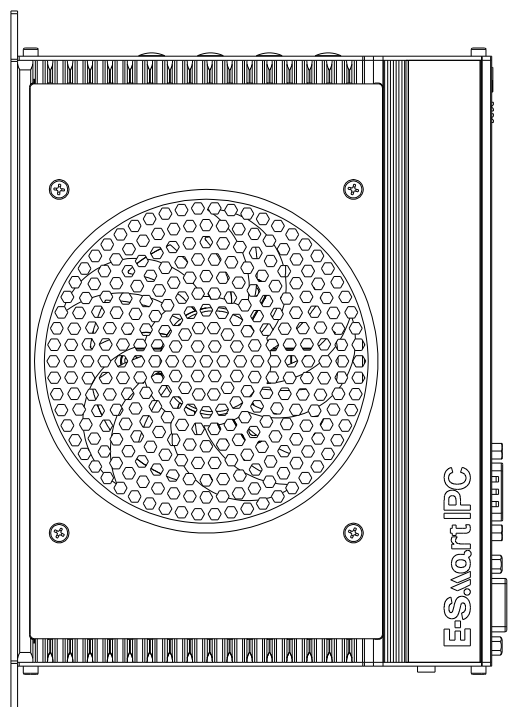
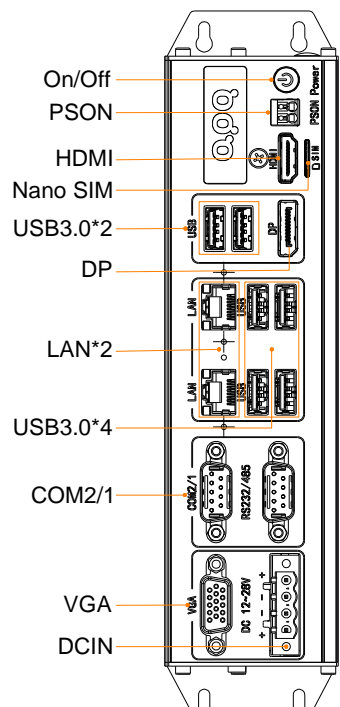
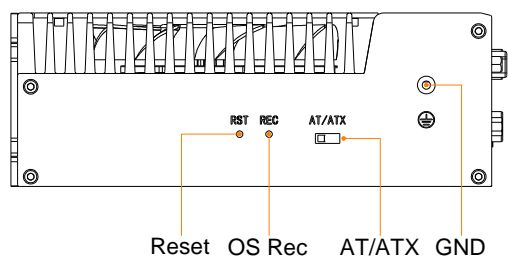


AK7170-2A/3A

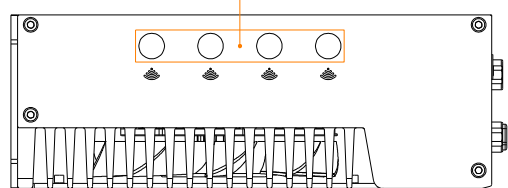


Product I/O

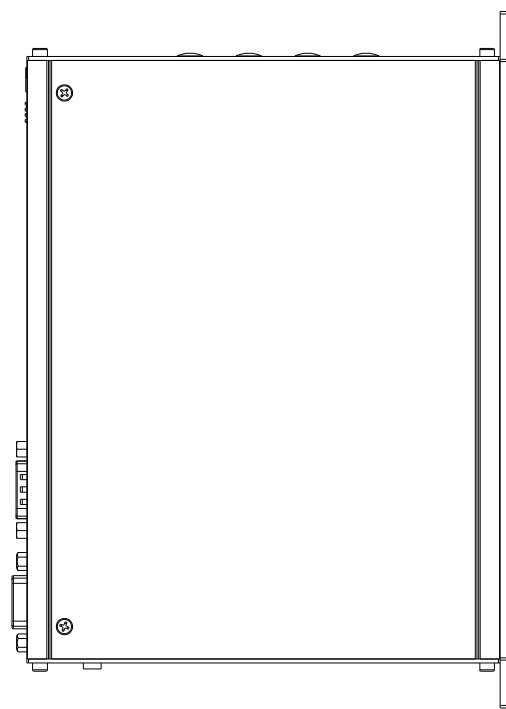
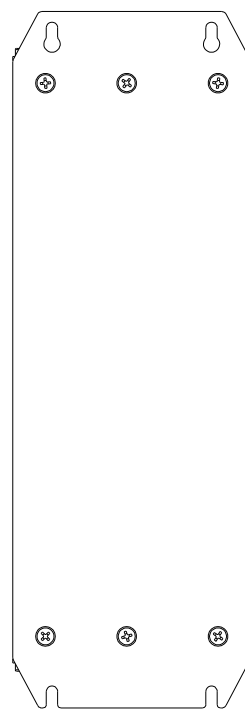
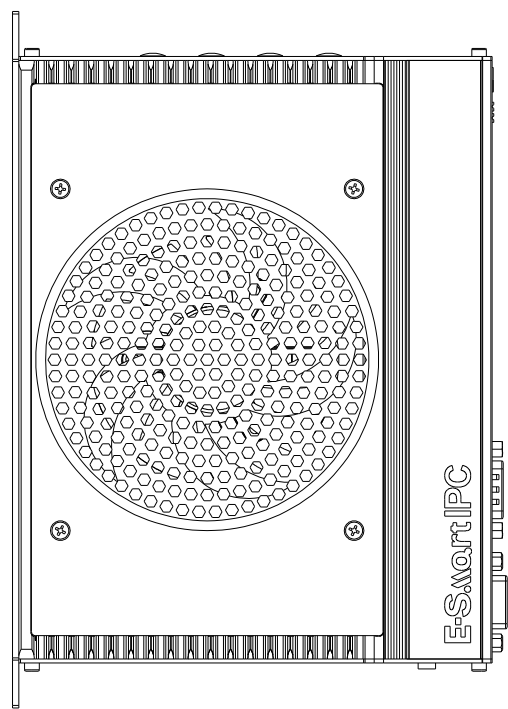
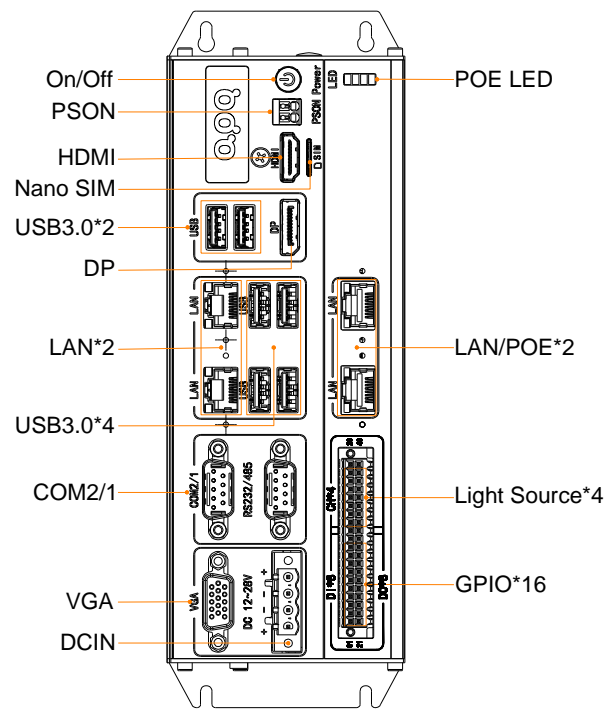
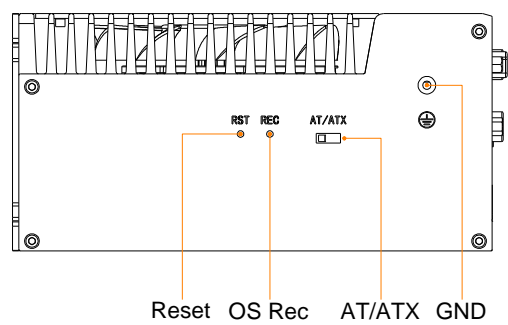
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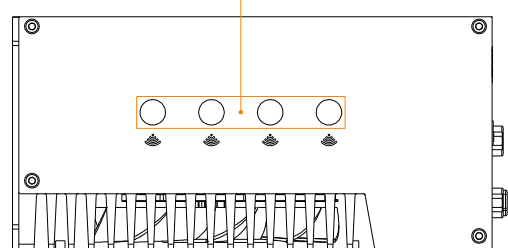
Antenna*4



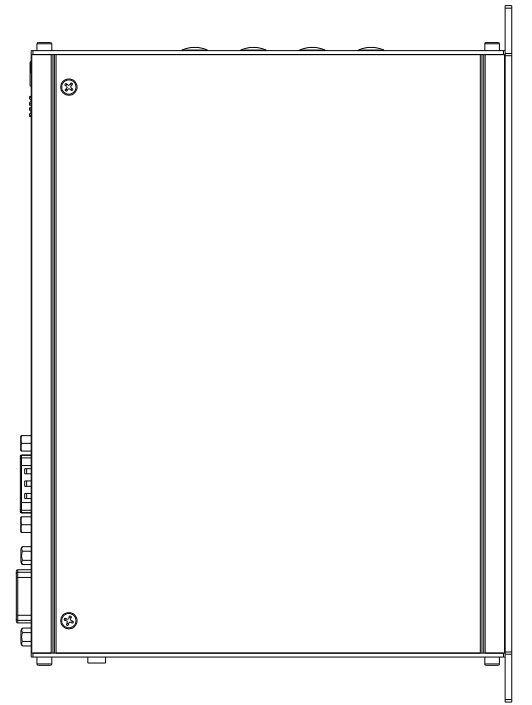
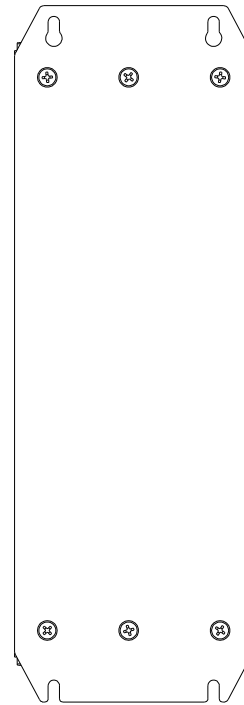
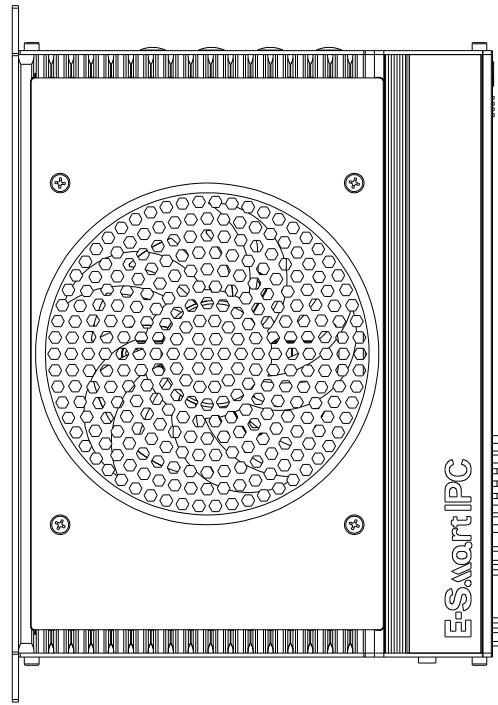
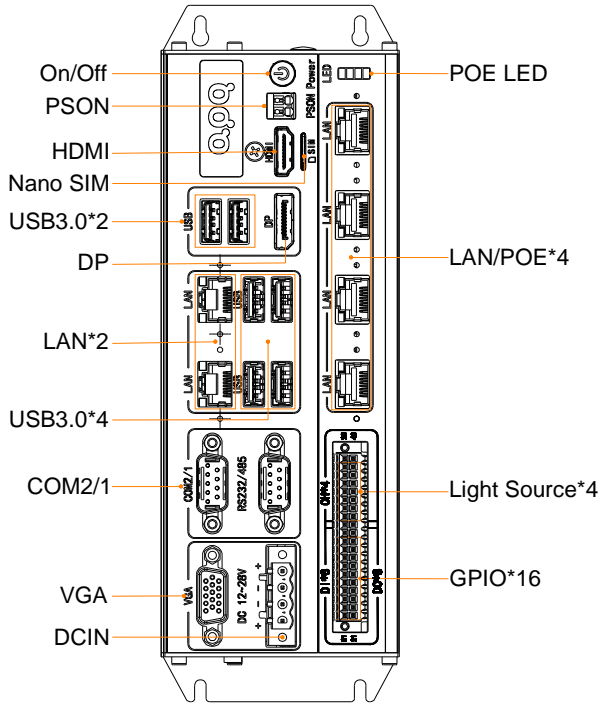
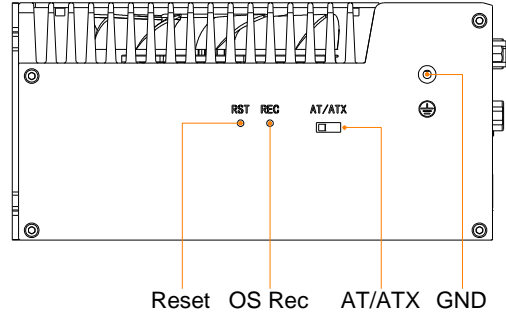
AK7170-1A



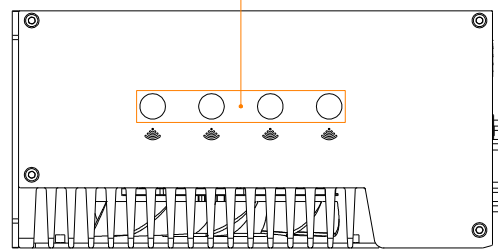
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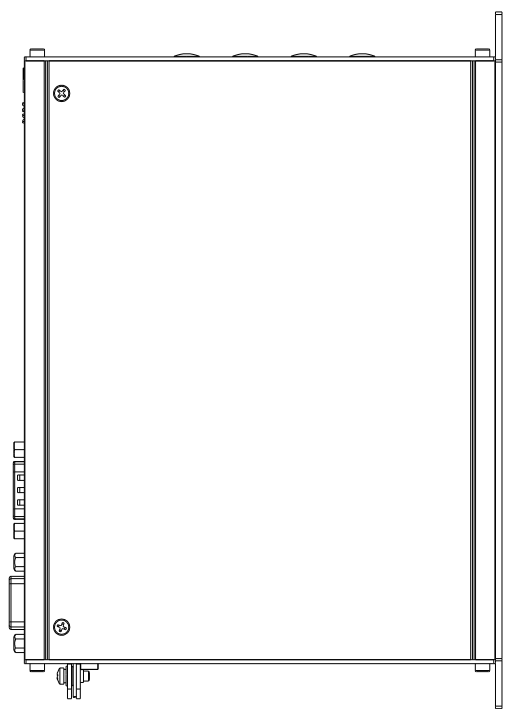
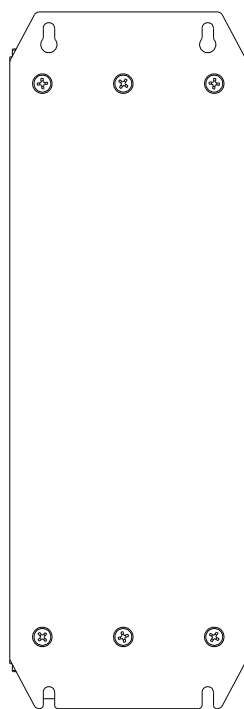
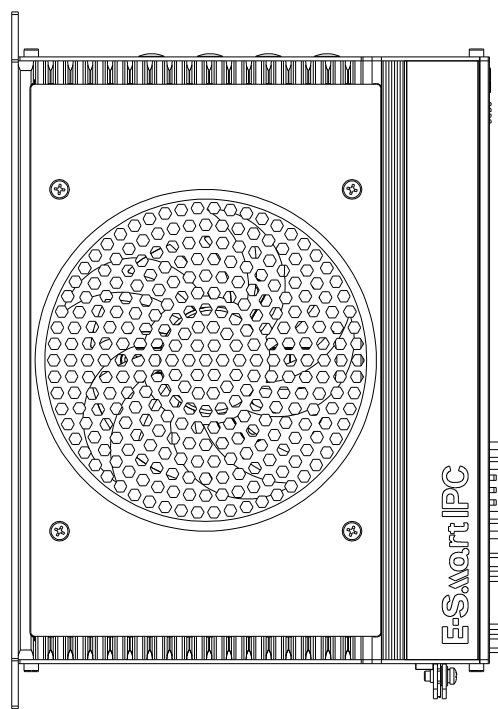
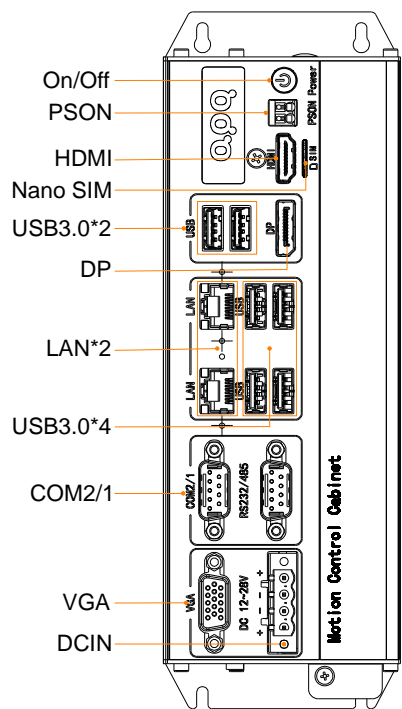
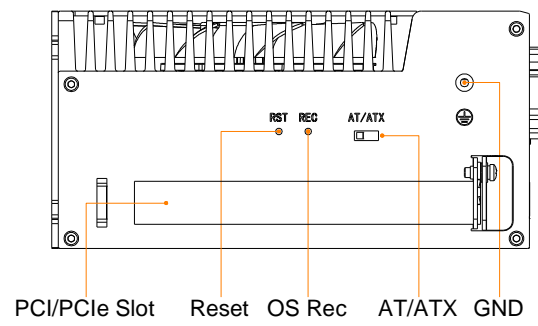
AK7170-1B



Antenna*4



AK7170-2A/3A



Antenna*4

