

# AIS-2031 Series

Mini-ITX Fanless Box PC Coffee Lakes-S H310  
Intel LGA-1151 Core i7/i5/i3 CPU, VGA/HDMI/DP  
2LAN,1COM, 4USB3/4USB2, DC 12/19/24V Input



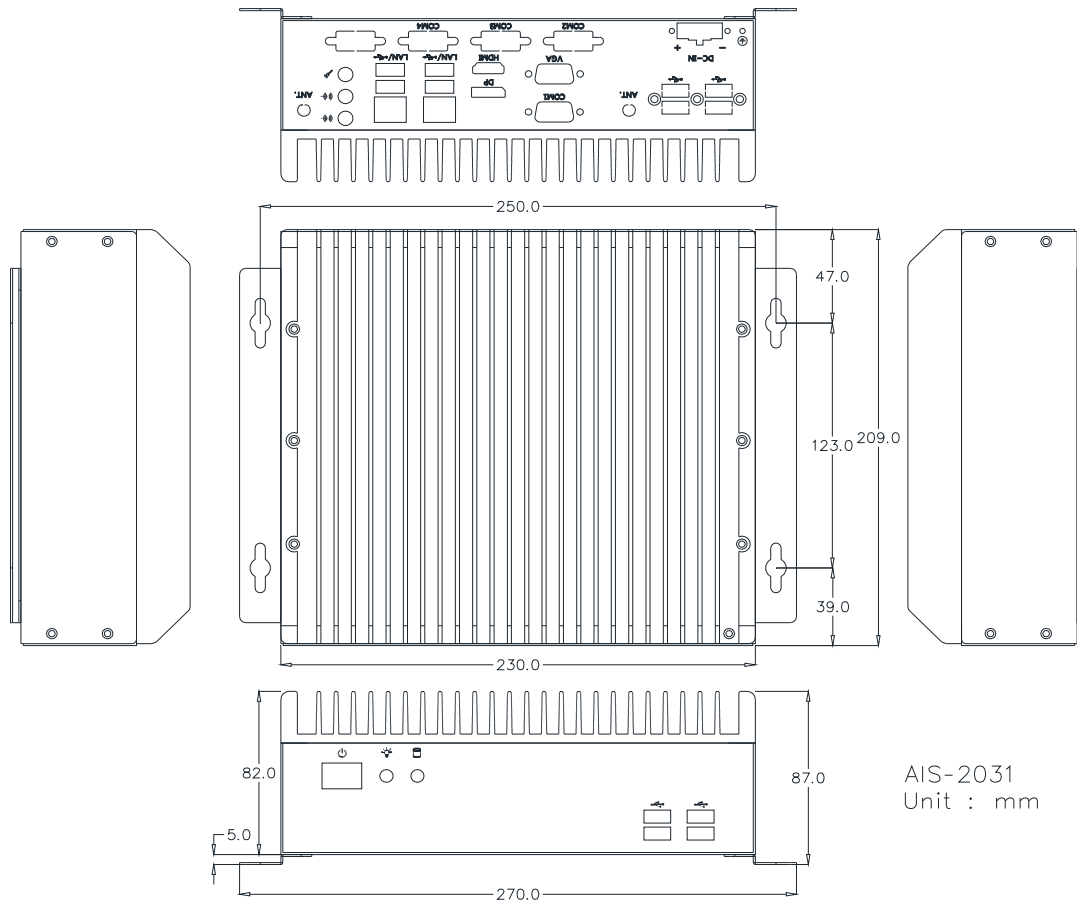
## Features

- Fanless Mini-ITX system with Intel H310 Chipset, supports Socket LGA-1151 Intel 8<sup>th</sup>/9<sup>th</sup> Core i7/i5/i3 (Coffee Lake-S) Processors
- Dual Channel DDR4, 2 x SO-DIMM, up to 32GB system memory
- Dual display VGA/HDMI/DP, Dual LAN by Intel i219V, i211AT
- 1 x COM (COM1 support RS-232/422/485, options COM2/3/4)
- 4 x USB 3.0 on rear I/O, 4 x USB 2.0 on front (options 4 x USB 2.0)
- 1 x M.2 slot 2242/2280 Storage SATA, 1 x M.2 2230 E Key slot
- One 2.5" HDD space for SATA SSD/HDD
- DC 12V / 19V / 24V input
- 0°C ~ 50°C harsh operation environment

## Specifications

AIS-2031 Series Key Features		AIS-2031-7E-M0-00P0	AIS-2031-5E-M0-00P0	AIS-2031-3E-M0-00P0
Processor System	CPU (SKL-S / KBL-S)	i7-9700TE	i5-9500TE	i3-9100TE
	Cache / Core	12MB, 8-Core/8-Thread	9MB, 6-Core/6-Thread	6MB, 4-Core/4-Thread
	Base / Max Frequency	1.8GHz / 3.8GHz	2.2GHz / 3.6GHz	2.2GHz / 3.2GHz
	TDP	35W		
Expansion Slot	Chipset	Intel H310		
	M.2 E Key	1 x M.2 2230 E Key slot(WiFi/BT)		
Memory	M.2 M Key	1 x M.2 2242/2280 M Key slot for SATA 3.0 storage (easy access)		
	Specification (SO-DIMM)	2 x Dual Channel DDR4-2666/2400 MHz SO-DIMM		
Graphics	Max. Capacity	Up to 32 GB system memory		
	HDMI	1 x HDMI 1.4, supporting resolution up to 4096x2160 @ 30Hz		
	DP	1 x DP, supporting resolution up to 4096x2160 @60Hz		
Ethernet	VGA	1 x VGA, supporting resolution up to 1920x1200 @60Hz		
	Interface Controller	Dual GbE, 1 x Intel i219V, 1 x Intel i211AT		
System Rear I/O	Connector	2 x RJ-45		
	SATA	2 x SATA3 ( 6.0 Gb/s)		
	VGA/HDMI/DP	1 x VGA, 1 x HDMI, 1 x DP		
	USB	4 x USB3.0, optional extra 4 x USB 2.0		
	Serial	1 x COM1 (RS-232/422/485 ), optional COM2/3/4		
System Storage	Audio	1 x Audio ports (Line-in, Line-out, Mic-in)		
	HDD Driver Space	1 x HDD Space for one 2.5" HDD (easy access)		
Optional Features on Rear I/O	COM2/COM3/COM4	3 x COM (COM2 RS-232/422/485, COM3/COM4 RS-232)		
	USB 2.0	4 x USB 2.0		
	LVDS	1 x LVDS (DB-26) by inquiry		
	3W Speaker Output	1 x DB9 for 2W speaker output by two 2-pin connector, L+/L-, R+/R-		
System Front Bezel	Power On-Off Switch	1 x Soft switch		
	Power LED	1 x LED for system power status		
	HDD LED	1 x LED for HDD data access status		
	USB 2.0	4 x USB 2.0		
Operation System	Windows 10	Win10 IoT 64-bit IoT Ent LTSB 2019		
Watchdog Timer	Output and Interval	System reset, programmable 1-255 sec/min; 1 sec. or 1min. / step		
System Power	DC Input	1 x 2-pin phoenix connector for DC 12V / 19V / 24V input		
Environment	Operating Temperature	0 ~ 50°C ( 32 ~ 122°F )		
	Air Flow Condition	51 ~ 55°C ( 124 ~ 131°F ) with 0.7m/s air flow		
	Storage Temperature	-40 ~ 85°C ( -40 ~ 185°F )		
Physical Size	Dimensions	230mm(W) x 209mm(D) x 82mm(H)		
Packing Size	Dimensions	310mm(W) x 310mm(D) x 160mm(H)		
Weight	N.W. / G.W.	4.5Kg / 5.0Kg		
Certifications	EMC	N/A		

## Dimension Drawing



## Ordering Information

Part Number	CPU	VGA/HDMI/DP	GbE	UBS 3.0	USB 2.0	COM	DDR4 Memory	SSD/HDD
AIS-2031-7E-M0-00P0	i7-9700TE	1/1/1	2	4	4	1	Option	Option
AIS-2031-7E-M32-H1TP0	i7-9700TE	1/1/1	2	4	4	1	32GB	1TB HDD
AIS-2031-5E-M0-00P0	i5-9500TE	1/1/1	2	4	4	1	Option	Option
AIS-2031-5E-M4-1TP0	i5-9500TE	1/1/1	2	4	4	1	4GB	1TB HDD
AIS-2031-3E-M0-00P0	i3-9100TE	1/1/1	2	4	4	1	Option	Option
AIS-2031-3E-M4-1TP0	i3-9100TE	1/1/1	2	4	4	1	4GB	1TB HDD

## Optional Items

Part Number	Description
SODIMM-DDR4-M4/M8/M16	204-Pin SODIMM DDR4-2133, 4GB/8GB/16GB
M2-M64L(2242)/N12L(2280)	M.2 SATA3 2242 64GB MLC/ M.2 2280 128GB MLC (M-KEY)
M2-M64D(2242)/N12D(2280)	M.2 SATA3 2242 64GB 3D-TLC / M.2 2280 128GB 3D-TLC (M-KEY)
SA-S64L/S12L/S25L/S64D/S12D/S25D	2.5" SATA SSD 64GB/128GB/256GB MLC, 2.5" SATA SSD 64GB/128GB/256GB 3D-TLC
SA-H1T	2.5" SATA HDD 1TB WD, 7200RPM
AC-9260	M.2 2230 (E-KEY) Wi-Fi Module, Intel AC9260 802.11abgn + Bluetooth 5.0, dual band 2T2R
AIS-WM-BK	AIS Chassis Wall Mount Kits with Screws, L=178mm
DHAN3-60W-2P	AC-DC 12V@5A 60W Adapter, with 2-pin Terminal Block