

AIH10 Series

Intel® Core™ S Series & Xeon® W Fanless Box Computer



Features

- Intel® Xeon® W / Core™ S i9, i7, i5, i3, Pentium®/Celeron® processor
- Supports LGA1200 socket processor up to 35W
- Intelligent eKit with AI function to monitor system health
- Wi-Fi and Wireless Communication: 4G, 5G, WLAN, GPS, GSM/GPRS, WiFi 6 and Bluetooth
- Special Power Design:
 - Wide voltage 9~48V DC input
 - RVP/OVP/UVP/OCF support
 - Surge protection: 200V/1ms
 - Power ignition control
- Easy Expansion & Installation
- Remote on/off power switch

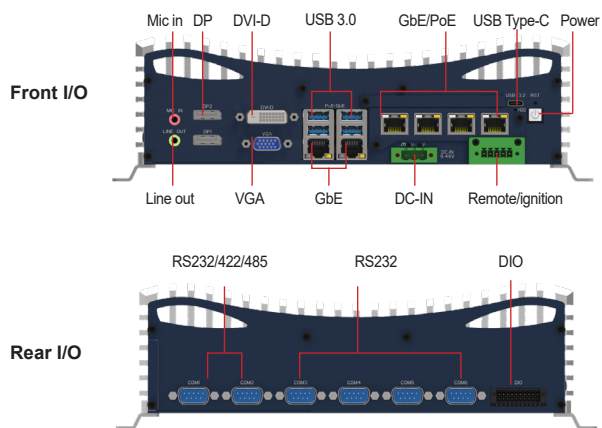


Specifications

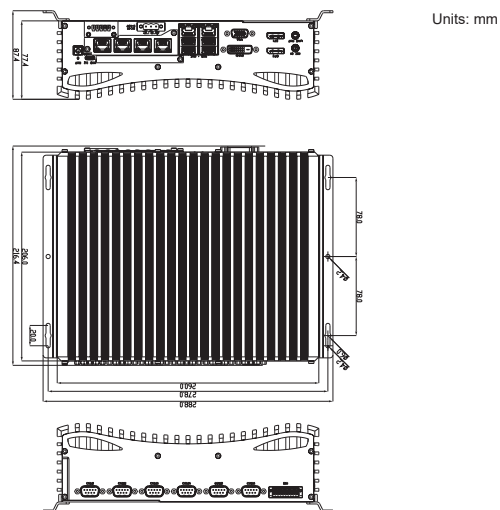
	AIH10	AIH10L
System		
CPU	Intel® Xeon®/Core™S 10th gen Intel® Core i9/i7/i5/i3 35W	Intel® Pentium®/Celeron® 10th gen Intel® Core i9/i7/i5/i3 35W
Chipset	Intel® W480E	Intel® H420E
Memory	2x DDR4 SO-DIMM Slot (Support DDR2933/2666/2400) ECC memory support by CPU	
Graphics	Intel® UHD Graphics	
BIOS	AMI	
AI Controller (AIC)	AI for system monitoring and predictive analysis (DMCI Library & DMCT app available)	
TPM	TPM 2.0 SLB9665	
Power		
DC Input	9~48VDC	
Power in Protection	Reverse-Voltage, Over-Voltage, Under-Voltage, Over-Current	
Remote/Ignition	1x ATX power on/off switch, 5-pin terminal block including 3-pin remote control and 2-pin ignition signals (pitch 3.81 mm)	
Power Mode	AT/ATX/ Ignition (BIOS setting)	
Mechanical		
Dimensions (WxDxH)	260(W) x 206(D) x 77.42(H) mm (10.2" x 8.11" x 3.05") Expansion Box: (EP1/2/3) 260(W) x 219.3(D) x 124.4(H) mm (10.2" x 8.6" x 4.9")	
Weight (net/gross)	3.7kg	
Mounting	(Standard) foot stand (Option) wall mount bracket	
External IO		
Display Ports / Resolution	1x VGA 2x Display Port 1x DVI-D	
Triple Display Ports Combinations	2x DP+ 1x VGA 2x DP+ 1x DVI-D 1x DP+ 1x DVI-D+ 1x VGA	1x DP+ 1x VGA 2x DP 1x DP+ 1x DVI-D 1x DVI-D+ 1x VGA
Ethernet	2x RJ45 GbE (1x i219LM + 1x i210IT)	
Digital I/O	1x DIO port: (standard): non-isolated 16-bit GPIO (option-i): isolated 8-bit DI & 8-bit DO	
USB	1x USB3.2 Type C (With 2 DP Lanes, PD Support) 4x USB3.2 Type A (Gen2)	
COM	2x RS-232/422/485 (auto flow control), 4x RS-232	
Audio	ALC892, Mic in, Line out	

IOM Option	AIH10 4x i210 RJ45 GbE AIH10P 4x i210 RJ45 GbE PoE+ AIH10V 4x i210 M12 GbE AIH10VP 4x i210 M12 GbE PoE+ AIH10U 8x USB 3.0 Type A	NA
Storage		
Internal Drive Bay	3x internal SATA port for 2.5" HDD/SSD	
M.2	2x PCIe4 NVMe, M.2 M Key 2280 1x PCIe4 NVMe, M.2 M Key 2280	
mSATA	1x full length mSATA (muxed with Mini PCIe)	
Micro SD	1x Micro SD	
Expansion Slot		
Mini-PCIe	1x MiniCard (mPCIe/mSATA/USB2.0/SIM) (Support Power On/Off, SIM Detect) 1x MiniCard (mPCIe/USB2.0/SIM) (Support Power On/Off, SIM Detect)	1x MiniCard (mSATA/USB2.0/SIM) (Support Power On/Off, SIM Detect)
M.2	1x M.2 B Key 3052 (USB3.0/PCIe/SIM)(Support Power On/Off, SIM Detect) 1x M.2 E Key 2230	
PCI/PCIe (Expansion Box)	*EP1 (1x PCIe x16, 1x PCI) *EP2 (1x PCIe x16, 1x PCIe x4) *EP3 (2x PCI) (standard type w/ fan kit)	*EP2 (1x PCIe x16) *EP3 (2x PCI) (standard type w/ fan kit)
Other		
Internal USB	1x Internal USB 2.0 header	
Antenna	4x antenna openings	
Environment		
Operating Temperature (TBD)	35W CPU: -20°C~75°C	35W CPU: -20°C~75°C
Storage Temperature	-40°C to 85°C (-40°F to 185°F)	
Relative Humidity	95% @ 40°C (104°F), non-condensing	
Vibration During Operation	5Grms with SSD (IEC60068-2-64: random 5~500Hz)	
Shock During Operation	50Grms with SSD (IEC60068-2-27: Half Sine, 11ms duration)	
Certification		
EMC	CE FCC Class A	
OS Support		
Windows	Windows 10 64-bit Windows 10 IoT Windows 11 (AIC TBD)	
Linux	Linux	

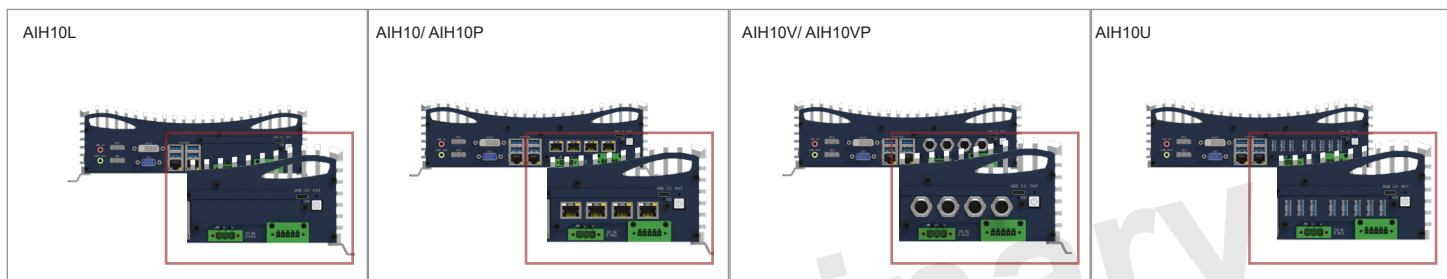
I/O Interfaces



Dimensions

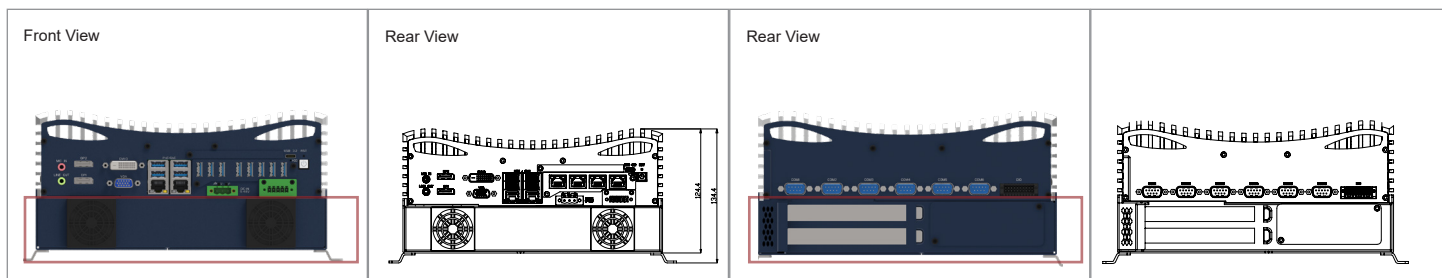


I/O Comparison Chart



Model Name	DP	DVI	VGA	GbE (RJ45)	GbE / PoE (RJ45)	GbE (M12)	GbE/POE (M12)	GPIO	Isolated DIO	M.2 Key-M 2280	Mini-PCIe	USB type A	USB type C	RS-232	RS-232 / 422 / 485
AIH10				6	0	0	0			2	2	4			
AIH10P				2	4	0	0			2	2	4			
AIH10V	2	1	1	2	0	4	0	2	0	2	2	4	1	4	2
AIH10VP				2	0	0	4			2	2	4			
AIH10U				2	0	0	0			2	2	12			
AIH10L				2	0	0	0			1	1	4			
AIH10-i				6	0	0	0			2	2	4			
AIH10P-i				2	4	0	0			2	2	4			
AIH10V-i	2	1	1	2	0	4	0	0	2	2	2	4	1	4	2
AIH10VP-i				2	0	0	4			2	2	4			
AIH10U-i				2	0	0	0			2	2	12			
AIH10L-i				2	0	0	0			1	1	4			

Expansion Box Comparison Chart



Expansion Box Type	PCIe x16	PCIe x4	PCI	Fan kit	Available Model
EP1	1	0	1	1	AIH10-P/V/VP/U
EP2	1	1	0	1	AIH10-P/V/VP/U/L ^{*(1)}
EP3	0	0	2	1	AIH10-P/V/VP/U/L

note
^{*(1)}:For EP2, AIH10-L series only supports 1x PCIe x16, no PCIe x4.