

AIR-120

26 TOPS AI Inference System with Intel® Atom® Processor and Hailo-8 AI Acceleration Module

Preliminary



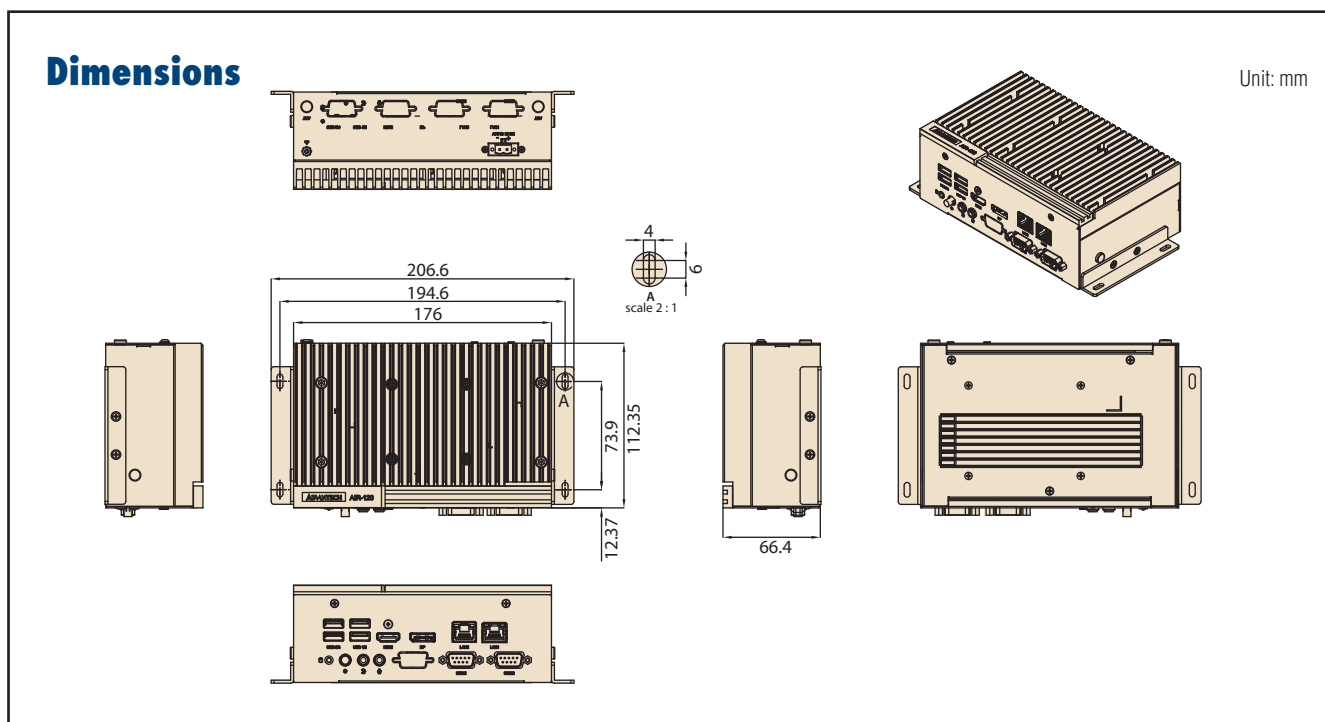
Features

- Intel® Atom™ x7433RE, Processor N97, and Core™ i3-N305
- Empowered by Hailo-8 M.2 AI module up to 26 TOPS
- 2 independent display: HDMI + DP
- Vertical I/O: 2 x LAN, 4x USB, 2 x COM
- Rich AI toolkits for runtime integration and model deployment
- Flexible expansion with 3x M.2:
B key 2280 (NVMe storage),
E key 2230 (Wi-Fi),
B key 3052 (Hailo AI built-in)
- Suitable for Industrial usage:
-20~60°C wide temperature and 12-24V wide voltage support

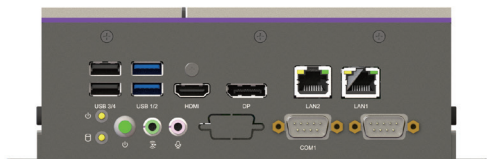
WISE-DeviceOn HAILO EdgeAI SDK LISTED cUL US CE FC

Specifications

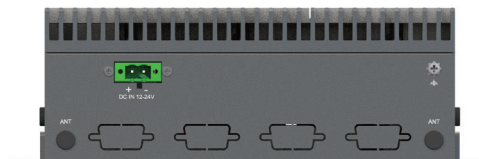
Processor System	CPU	x7433RE	N97	i3-N305
	Frequency	1.5GHz	2.0GHz	1.8GHz
	Max. Frequency	3.4 GHz	3.60 GHz	3.80 GHz
	Core	4	4	8
	CPU TDP	9W	12W	15W
	System Chipset	Integrated in CPU		
Memory	Technology	DDR5 4800 MHz 262 pin SODIMM		
	Capacity	Max. capacity 16GB		
Graphics	Chipset	Intel® UHD Graphics		
	Graphic Engine	DX12, OGL4.0, OCL1.2, HW Encode: HEVC/H265, AVC/H264, VP9 HW Decode: HEVC/H265, AVC/H264, VP9		
	HDMI/DP	1 x HDMI 2.0, up to 4096 x 2160 x 24bpp@48-60Hz 1 x DP1.4a, up to 4096 x 2304 x 36bpp@60Hz		
Storage	M.2	1x B-Key 2280 (SATA or PCIe x1)		
	SSD	1 x 2.5" SATAIII Drive bay Note: M.2 slots and 2.5"SSD can only be used exclusively		
I/O Interface	LAN1	100/1000/2500 Intel i226 2.5GbE		
	LAN2	10/100/1000 Intel i210 GbE, support EdgeBMC, Out of Band remote control		
	USB 2.0/USB 3.2	2/2		
	Audio	1 x Mic-in, 1 x Line-out, Realtek ALC888S HD Audio		
	COM	2 x RS-232/422/485 (default COM1, COM2) 2 x RS-232 (optional COM3,COM4)		
	DIO	1 x DB9, 8 bit (optional)		
	CANBus	2 x DB9 for CAN-FD (optional)		
Expansion	M.2	1 x E-Key 2230 (PCIex1, USB2.0)		
		1 x B-Key 3052 w/ Nano SIM (PCIex2, USB 2.0) *Default bundled with Hailo AI module B+M key 1 x B-Key 2280 (SATA, PCIe x1)		
Trusted Platform Module	TPM 2.0	NPCT764AABYX		
Power Requirement	Power Input Voltage	12-24 V _{DC}		
	Power Type	ATX/AT mode (Default ATX)		
Power Consumption	Typical (OS idle mode)	TBC		
	Max. (Full loading)	TBC		
Physical Characteristics	Mounting	Wall Mounting		
	Dimensions (W x H x D)	176 x 112.35 x 66.4 mm		
	Weight	1.6 kg (3.5 lb)		
Environment	Operating Temperature	-20 ~ 60 °C, with 0.7m/s air flow		
	Storage Temperature	-40 ~ 85 °C (-40 ~ 185°F)		
	Relative Humidity	95% @ 40 °C (non-condensing)		
	Vibration during Operation	3 Grms, IEC60068-2-64, random, 5-500 Hz, 1hr/axis (with Wall Mount)		
	Shock during Operation	30 G, IEC-60068-2-27, half sine, 11 ms duration (with Wall Mount)		
Software Support	Microsoft Windows	Windows 10/ Windows 11 IoT 64-bit		
	Linux	Ubuntu 22.04		
Certification	EMC	CE/FCC Class B, Heavy Industry 61000-6-4, 61000-6-2, CCC, BSMI		
	Safety	UL, CB, CCC, BSMI		



Front View



Rear View



Ordering Information

Part No.	CPU	Hailo AI module	M.2	2.5" SSD	HDMI	DP	LAN	COM	DIO	CANBus	USB	Operating Temperature
AIR-120H-BOA1E	N97	Built-in										
AIR-120H-S8A1E	i3-N305	1x M.2	3	Not support								
AIR-120H-B5A1E	x7433RE	B+M key 2242			1	1	2	2	optional	Optional	2x USB 3.2 2x USB 2.0	-20~60°C
AIR-1200-BOA1E	N97											
AIR-1200-S8A1E	i3-N305	w/o Hailo	Not Support	1 x 2.5" SSD								

Packing List

Part Number	Description
-	1 x AIR-120 unit
1960052226N004	2 x Wallmount
2006R12000	1 x User manual (Simplified Chinese)
36WSWPD0BUND11	1 x WISE-DeviceOn Package
1652000099	1x Phoenix connector counterpart

Optional Items

Part Number	Description
1700035775-01	DB9 Cable for COM3/COM4
1700030518-01	DB9 Cable for CAN-FD
1700035814-01	DB9 Cable for DIO
XARK-ADP-90MDH	90W Power Adaptor (19V DC in)
1700001524	Power Cable 3-pin 180cm, USA type
170203183C	Power Cable 3-pin 180cm, Europe type
170203180A	Power Cable 3-pin 180cm, UK type
1700008921	Power Cable 3-pin PSE Mark 183cm

Embedded OS

Part Number	Description
TBC	Win 10 IoT 64 bit w/ WISE Device-On Core i3/i5 SKU
TBC	Ubuntu Desktop 22.04 LTS 64bit