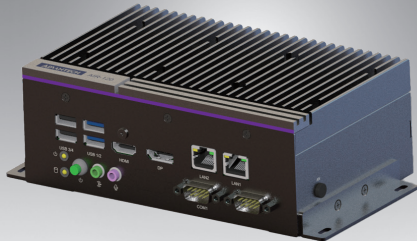


# AIR-120

## 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 3042 (Hailo AI)
- Suitable for Industrial usage:  
-20~60°C wide temperature and 12-24V wide voltage support

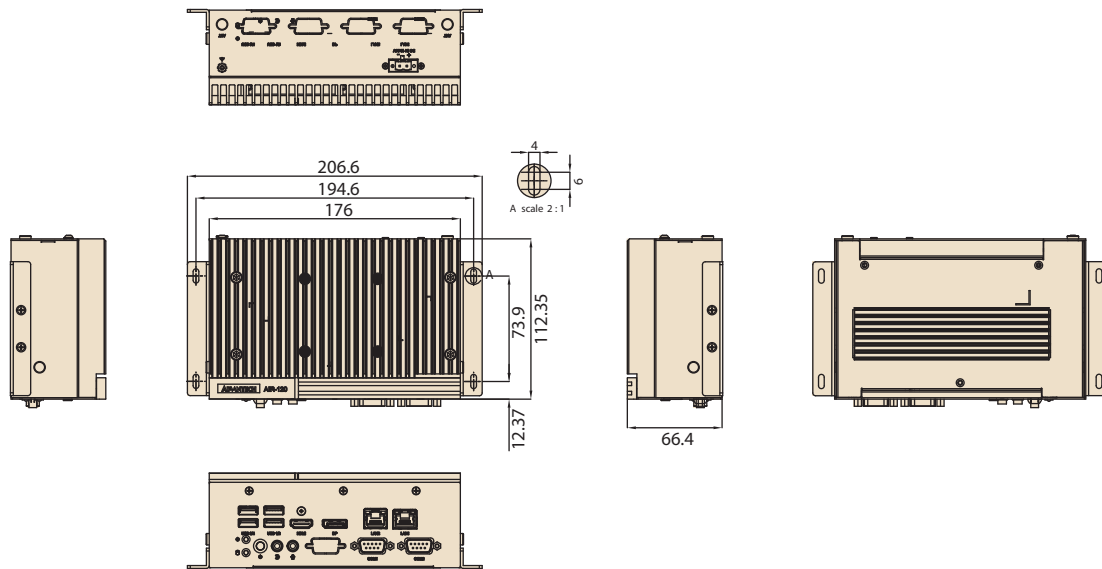
WISE-DeviceOn HAILO EdgeAI SDK LISTED cUL US CE FC

### Specifications

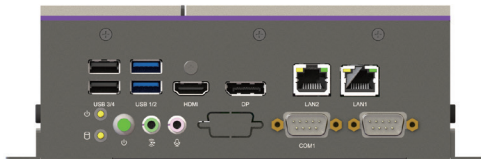
Name		AIR-120-S54A1	AIR-120-U04A1	AIR-120-S84A1
Processor System	CPU	x7433RE	N97	i3-N305
	Core	4	4	8
	CPU TDP	9W	12W	15W
	System Chipset	Integrated in CPU		
Memory	Technology	DDR5 4800 MHz 262 pin SODIMM		
	Capacity	Max. capacity 16GB		
Graphics	Chipset	Intel® UHD Graphics		
	Graphic Engine	DX12, OGL4.0, 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	SSD/M.2	B-Key 2280 (SATA or PCIe x1)		
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		
	DIO	Reserved DB9, 8 bit		
Expansion	M.2	Reserved DB9, 8 bit		
		CANBus Reserved 2 x DB9 for CAN-FD		
		1 x E-Key 2230 (PCIex1, USB2.0) 1 x B-Key 3042/3052 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 <sub>DC</sub>		
	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 x 66 mm		
	Weight	TBC		
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)		
Software Support	Shock during Operation	30 G, IEC-60068-2-27, half sine, 11 ms duration (with Wall Mount)		
	Microsoft Windows	Windows 10/ Windows 11 IoT 64-bit		
Certification	Linux	Ubuntu 22.04		
	EMC	CE/FCC Class B, Heavy Industry 61000-6-4, 61000-6-2, CCC, BSMI		
	Safety	UL, CB, CCC, BSMI		

## Dimensions

Unit: mm



## Front View



## Rear View



## Ordering Information

Part No.	CPU	Memory	Storage	Hailo AI module	Display	LAN	USB	RS-232/ 422/485	M.2	Power Input	Operating Temp.	Audio
AIR-120-S54A1	x7433RE	Up to 16GB	1x B-Key 2280	1x M.2 B+M key 2242	1 x HDMI1, 1 x DP	2 (1GbE/2.5GbE)	4	2	E-key 2230 & B-Key 3042 & B-Key 2280	12-24 Vdc	-20 ~ 60 °C	Mic-in & Line-out
AIR-120-U04A1	N97	Up to 16GB										
AIR-120-S84A1	i3-N305	Up to 16GB										

## Packing List

Part Number	Description
-	1 x AIR-120 unit
1960052226N004	2 x Wallmount
TBC	1 x User manual (Simplified Chinese)
36WSWPDOBUND11	1 x WISE-DeviceOn Package
-	1x Phoenix connector counterpart

## Optional Items

Part Number	Description
96PSA-A120W24T2-4	120W Power Adaptor (24V DC in)
1702002600	Power cable 3-pin 183cm, USA type
1702002605	Power cable 3-pin 183cm, EU type
1702031801	Power cable 3-pin 183cm, UK type
1700000237	Power cable 3-pin 183cm, PSE type

## 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