

AIR-410

Edge AI system powered by AMD Ryzen 8000 series processor

NEW



Features

- Ryzen™ Embedded 8000 Series Processor
- In total 39TOPS (CPU+iGPU+iNPU)
- Dual channel memory up to 96GB DDR5 5600MT/s
- One PCIe x16 Slot, support up to 350W for GPU card with powerful 850W PSU build-in
- Flexible expansion with 3x M.2: M key 2280, E key 2230, B key 2242
- Vertical I/O: 1 x DP 1.4, 1 x HDMI 2.1, 3 x 2.5GbE, 4 x USB 3.2, 2 x USB 2.0, 4 x COM, 2 x 8bit GPIO(optional)
- Edge AI SDK AI toolkit, OS Windows 11 LTSC & Ubuntu 24.04 LTS compatible

EdgeAI SDK WISE-DeviceOn LISTED CE FC RoHS COMPLIANT PRODUCT

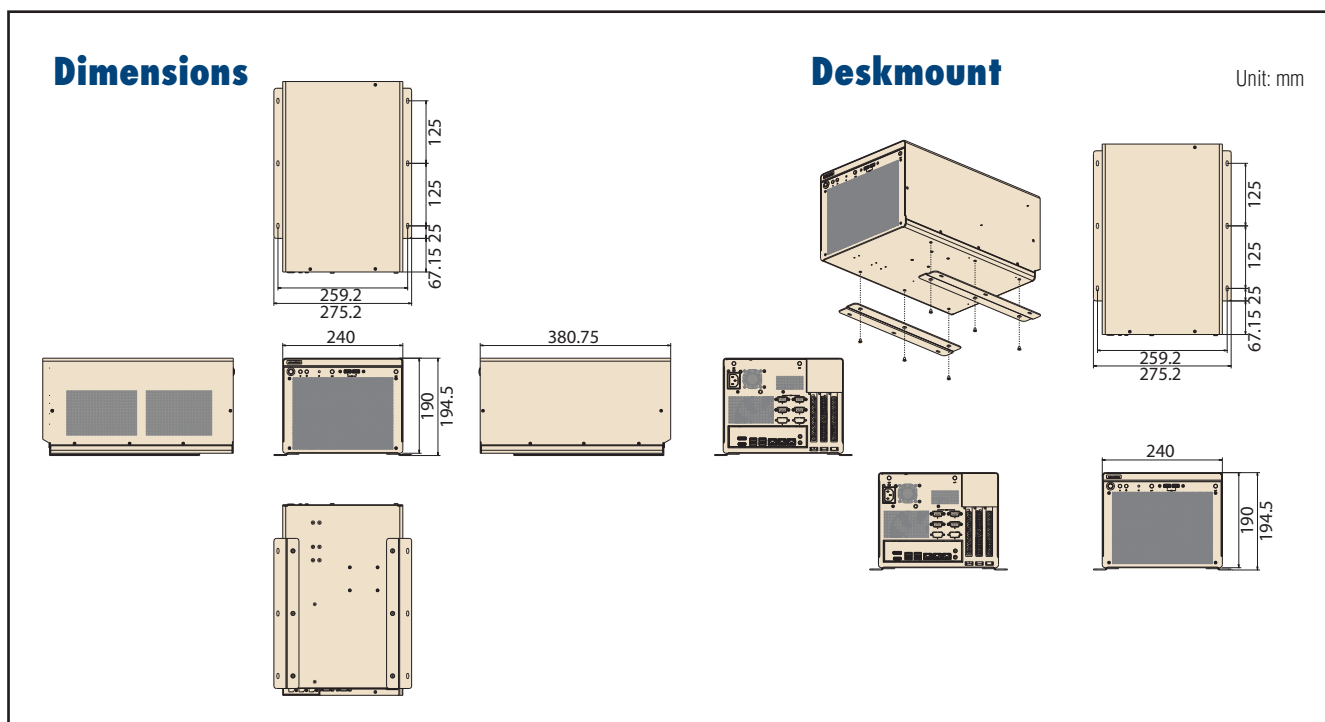
Specifications

Processor System	CPU	Ryzen 7 Pro 8845HS	Ryzen 5 Pro 8645HS
	Base Frequency	3.8 GHz	4.3 GHz
	Max. Turbo Frequency	5.1 GHz	5.1 GHz
	L3 Cache	16 MB	16 MB
	Core Number	8	6
	TDP	45W	45W
	Max TDP	54W	54W
	Chipset	N/A	
Memory	BIOS	AMI UEFI 256 Mbit SPI	
	Technology	Up to 2x SODIMM DDR5 5600MHz	
	Max. Capacity	1x slot up to 48 GB, in total 96 GB	
Ethernet	Socket	2 x 262-pin SO-DIMM	
	LAN 1, 2, 3	10/100/1000/2500 Mbps, LAN 1 (Intel i226V), LAN2/3 (Intel i226LM), support Wake On LAN /Boot from LAN	
Others	Watch dog Timer	255-level timer interval, setup by software	
	TPM	Infineon TPM2.0 SLB9672	
I/O Interface	COM	3 x RS-232 port(COM2/3/4), 1x RS-232/485 (COM1, by jumper)	
	USB (Type A)	4 x USB 3.2 (rear) & 2 x USB 2.0 (front)	
	HDMI	1 x HDMI 2.1, up to 3840 x 2160@60Hz	
	DP	1 x DP 1.2, up to 3840x2160@120Hz	
	DIO	2 x 8bit DIO (internal IO, pin header)	
	Audio	1 x Mic-in, 1 x Line-out, Realtek ALC888S HD Audio	
Expansions	M.2 M Key	1 x M key 2280 (PCIe Gen4 x4)	
	M.2 B Key	1 x B key 2242 (PCIe Gen4 x2)	
	M.2 E Key	1 x E key 2230 (PCIe Gen3 x2, USB 2.0)	
	Add-on Card Slot#1	One PCIe x16 (signal PCIe x8), Max. card size (W x H x D): 60 x 130 x 305 mm#3	
Storage	Storage	2 x 2.5" SATAIII Swappable SSD (Max Height 7mm)	
Software Support	Microsoft Windows	Windows 11 LTSC	
	Linux	Ubuntu Desktop 24.04 LTS	
Power Requirements	Power Type	ATX/AT mode (Default ATX)	
	Power Input Voltage	100-240V AC	
	Power Adapter	850W power supply built-in	
Power Consumption	Typical (OS idle mode)	25.83W	27.8W
	Max. (Full loading)	108.85W	108.26W
Mechanical	Dimensions (W x H x D)	240 x 190 x 380.7 mm	
	Weight	6.9 Kg	
Environment	Operating Temperature	0 ~ 45 °C (w/o PCIe Card), 0~ 40 °C (w/ PCIe Card)#2	
	Storage Temperature	-40 ~ 85 °C	
	Relative Humidity	95% @ 40 °C (non-condensing)	
	EMC	CE/FCC Class B, CCC, BSMI	
	Safety	CB(62368), UL(62368), CCC, BSMI	

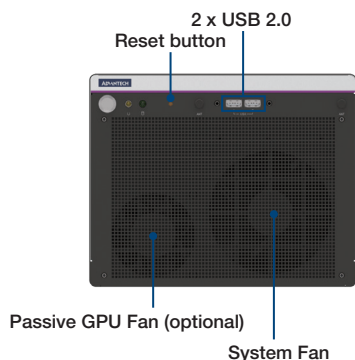
#1 Devices with graphics cards are not suitable for use in high-vibration environments.

#2 Operating temperature varies by PCIe card; no universal guarantee applies.

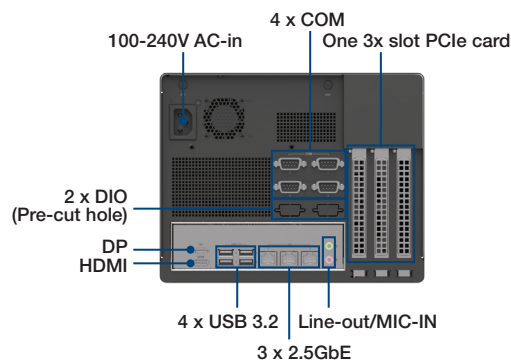
#3 The graphics card models listed above have only been partially tested. Please verify physical fitment as not all dimensions are guaranteed.



Front View



Rear View



Ordering Information

Part No.	CPU	DDR5	2.5 GbE	HDMI	DP	SATA	RS-232	RS-232/485	USB 3.2	USB 2.0	DIO	M.2 M Key	M.2 E Key	M.2 B Key	Power Supply	Expansion	Made in
AIR-4100-S8A1E	Ryzen 7 Pro 8845HS																China
AIR-4100-S3A1E	Ryzen 5 Pro 8645HS	Up to 96GB	3	1	1	2	3	1	4	2	2 (option)	1	1	1	850W Built-in	One PCIe x16 (signal PCIe x8)	China
AIR-4100-S8A1U	Ryzen 7 Pro 8845HS	Up to 96GB	3	1	1	2	3	1	4	2	2 (option)	1	1	1	850W Built-in	One PCIe x16 (signal PCIe x8)	Taiwan
AIR-4100-S3A1U	Ryzen 5 Pro 8645HS																

Packing List*

Part Number	Description
-	AIR-410 Unit
1960104726N001	Desk mounting kit
1960118571N000	PCIe Card fixed bracket
1960117846T000	SSD Outside Door
36WSWPD0BUND11	WISE-DeviceOn Package

* In case of any changes, the actual packaging shall prevail.

Operating System

Part Number	Description
20706U24DS0020	Ubuntu Desktop 24.04 LTS
20706WLH1S0103	Windows 11 IoT Enterprise 2024 LTSC ENU 64bit for Ryzen 7 Pro 8845HS
20706WLH1S0103	Windows 11 IoT Enterprise 2024 LTSC ENU 64bit for Ryzen 5 Pro 8645HS

Optional Item for Default SKU

Part Number	Description
1702002600-03	Power Cord UL 3P 10A 125V 183cm, USA type
1700018705	Power Cord EU 3P 10A 250V 183cm, EU type
1700032693-11	Power Cord BSI 3P 10A 250V 183cm, UK type
1700000237	Power Cord PSE 3P 12A 125V 183cm, PSE special connector
1700036020-01	DB9 Cable for DIO, 40cm
1700036177-01	1 to 2 90C power cable for PCIe card (2x6P-3.0+1x4P-2.0)/2x4P-4.2x2
1700035539-01	1 to 4 90C power cable for PCIe card (2x6P-3.0+1x4P-2.0)/2x4P-4.2x2
1750009113-01	System Fan 8038, G55H2087DHR, 8pin PWM

GenAI Studio | End-to-End Preparation for Edge AI

A powerful edge-AI model development platform that makes generative AI real on your own hardware. Built on a high-performance LLM foundation, it lets you **fine-tune, customize, and integrate large language models without heavy cloud GPU costs**, bringing AI innovation directly into edge devices and local servers. From multimodal generation to retrieval-augmented workflows, GenAI Studio streamlines the full lifecycle—from dataset preparation to optimized model deployment.



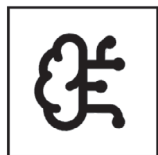
ADVANTECH

Edge AI SDK GenAI Studio

Streamlined LLM Development

- Integrated Fine-Tuning and Inference
- Optimized AI Computing Resources
- Secure On-Premises Platform
- Integrable Inference API

Benefits and Features



Accelerated LLM Customization

- Full-parameter fine-tuning for domain-specific models
- Optimized for limited GPU environments
- Integrated aiSSD middleware for cost-efficient post-training
- Built-in UniInfra acceleration framework



Flexible Model & Pipeline Integration

- Supports local and cloud-based LLMs
- Compatible with RAG pipelines
- Easy integration with existing data and APIs
- Rapid validation and online deployment



Global Customer Support

- System reliability certification
- Inference computing enablement
- Edge-to-cloud scalability collaboration

