

4U AI Ready Edge System

Advantech AIR-510

ADVANTECH × intel ai

Optimized for Industrial AI with Fast Data Access, Wide Connectivity, and Intel- Powered Performance

The AIR-510 is a powerful 4U rackmount edge AI system engineered for industrial environments requiring high-throughput inference, automation, and intelligent decision-making. Built on 12/13/14th Gen Intel® Core™ processors, it leverages DDR5 memory and advanced compute architecture to deliver scalable performance for demanding AI workloads such as vision analytics, predictive maintenance, and smart infrastructure. With support for up to 8x 2.5" SSDs, triple PCIe expansion slots, and extensive I/O—including 12 USB ports, dual GbE LAN, and optional IPMI for remote management—the AIR-510 ensures fast data access and seamless integration with sensors and peripherals. Its rugged design supports wide temperature ranges and meets global safety standards, making it ideal for deployment in manufacturing, healthcare, and transportation. Combined with Intel's AI optimization tools, the AIR-510 empowers real-time edge intelligence with reliability, flexibility, and speed.

***4U AI Ready
Edge System
built for scalable
inference,
rugged
deployment,
and industrial
integration***

Intel Products and Technologies

Accelerating AI and Analytics at the Edge



Intel® Core™
Processors



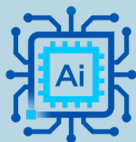
Intel® Arc™
Graphics



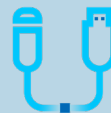
OpenVINO™
Toolkit

Key Features

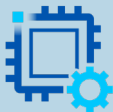
Empowered by Intel.



Scalable AI
Compute



Flexible I/O
Options



Industrial-
Grade Build



High-Speed
Storage

Advantech AIR-510



Product Specifications

CPU	12/13/14th Gen Intel® Core™ processors
Graphics	Intel® UHD Graphics 770/ 730/ 710 (depends on CPU model)
Memory	DDR5 up to 4400 MT/s, 192 GB (48GB per DIMM)
Storage	8x 2.5" SSD
Wireless Network	N/A
LAN	2 x GbE
Operating/Storage Temp.	0~40°C / -40 ~ 85°C
Dimension (W x D x H)	380mm x 176mm x 454.1mm
Weight	15.5 kg
OS	Windows 10/11 IoT, Ubuntu

Learn More

[Advantech AIR-510](#)

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