

AIR-500D

Intel® Xeon® D-1700 Series Extreme AI Edge Server Support Dual Graphic Cards

NEW



Features

- Intel® Xeon® D-1700 series processor
- 4x DDR4 SO-DIMM sockets support ECC/nonECC memory up to 128GB
- Support Dual PCIe x16 400W High performance GPU cards
- Rich storage with 4x 2.5" SATAIII SSD RAID 0/1 support
- Versatile expansions with PCIe x1/x4/x16, M.2 B key and E key support
- Built-in 1200W power supply for max. 800W GPU power consumption
- IPMI 2.0-compliant management with reliability and security enhancements
- Advantech WISE-DeviceOn containing remote control, edge AI Apps management and OTA updates
- Powerful edge server solution for AI training, advanced data analysis with domain focus edge cloud deployment

WISE-DeviceOn



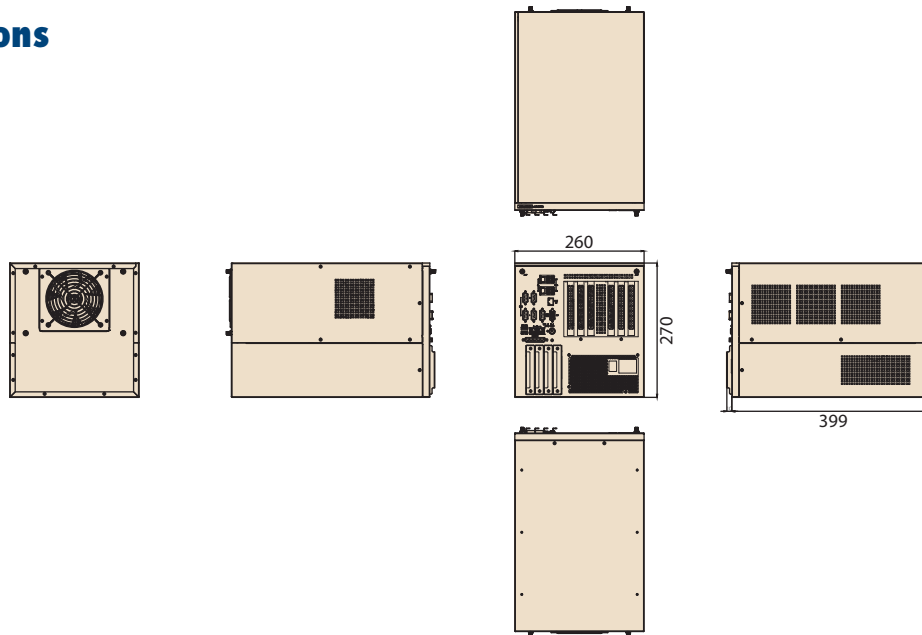
Specifications

Processor System	CPU	Intel Xeon D-1746TER	Intel Xeon D-1735TR	Intel Xeon D-1715TER
	Base Frequency	2.0 GHz	2.2 GHz	2.4 GHz
	Max. Turbo Frequency	3.1 GHz	3.4 GHz	3.5 GHz
	L3 Cache	15 MB	15 MB	10 MB
	Core Number	10	8	4
	TDP	67W	59W	50W
	Chipset	N/A		
Memory	BIOS	AMI EFI 512Mbit		
	Technology	Up to 4x 2666/2933MHz DDR4 ECC/non-ECC SO-DIMM		
	Max. Capacity	128 GB		
Ethernet	Socket	4 x 260-pin SO-DIMM		
	LAN 1, 2, 3, 4	10/100/1000 Mbps Intel I210 GbE, support Wake On Lan		
	Watch dog Timer	255-level timer interval, setup by software		
I/O Interface	TPM	TPM 2.0 (Support by optional AMO-I029)		
	Serial Port	4 x RS-232/422/485 port with auto flow control		
	USB	6 x USB 3.0		
Expansions	VGA	1 x VGA via Aspeed AST2500 BMC		
	Others	1 x 16bit DIO, 1 x GbE Management port, 1 x Console port		
	M.2 B Key	1 x 2230/2242/2280/3030/3042/3052 support SIM holder #1		
Storage	M.2 E Key	1 x 2230 for WiFi Module #1		
	Add-on Card Slot*	1 x PCIe x1, Max. card size support (H x L): 111mm x 167.6mm 1 x PCIe x4, Max. card size support (H x L): 111mm x 312mm 2 x PCIe x16 (signal PCIe x8), Max. card size (H x L x W): 125mm x 320mm x 2-slots *If only 2 PCIe x16 GPU cards installation, Max. card size (H x L x W): 125mm x 320mm x 3-slots		
	Storage	4 x 2.5" SATAIII Swappable SSD (Max Height 15mm), support RAID 0/1		
Software Support	Microsoft Windows	Windows Server 2019 64bit, (By project)		
	Linux	Ubuntu Desktop 20.04 LTS		
Power Requirements	Power Type	ATX		
	Power Input Voltage	100-240V AC		
	Power Adapter	1200W power supply built-in		
Power Consumption (CPU/Memory Only)	Typical	79.2	73.7	56.1
	Max.	116.6	116.6	82.5
Mechanical	Dimensions (W x H x D)	260 x 270 x 399 mm		
	Weight	10.6 kg		
System Management	IPMI	Aspeed AST2500 BMC		
		IPMI 2.0 with virtual media over LAN and KVM-over-LAN support		
Environment	Operating Temperature	-10 ~ 50 °C w/ 0.7 m/s airflow (with extended temp peripherals)		
	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		

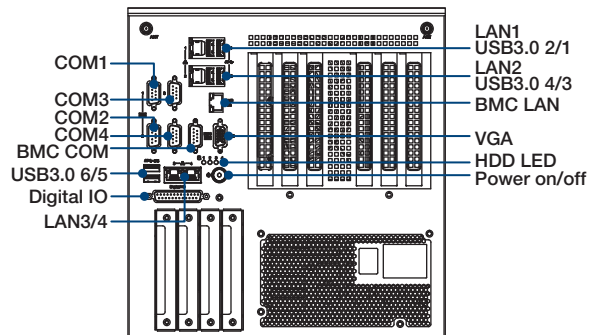
#1 SIM holder and M.2 slot are hardware interfaces for wireless communication integration only. System level RF certification is not available.

Dimensions

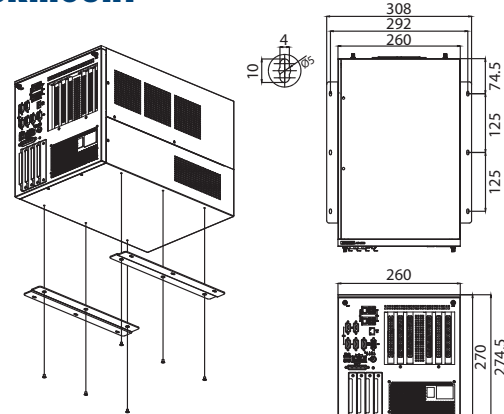
Unit: mm



Front Panel External I/O Mechanical Layout/Drawing



Deskmount



Ordering Information

Part No.	CPU	DDR4	GbE	VGA	SATA	RS-232/422/485	USB 3.0	GPIO	M.2 B Key	M.2 E Key	SIM	IPMI	TPM	Power Supply	Expansion
AIR-500D-T10A1	Intel Xeon D-1746TER	Up to 128GB	4	1	4	4	6	1	1	1	1	Yes	Optional	1200W Built-in	1x PCIe x1 1x PCIe x4 2x PCIe x16
AIR-500D-T40A1	Intel Xeon D-1735TR														
AIR-500D-T50A1	Intel Xeon D-1715TER														
AIR-500D-T10A2	Intel Xeon D-1746TER with new stepping Z2														
AIR-500D-T40A2	Intel Xeon D-1735TR with new stepping Z2														
AIR-500D-T50A2	Intel Xeon D-1715TER with new stepping Z2														

Note: Memory/Storage and operating system bundled by request.

Packing List

Part Number	Description
-	AIR-500D Unit
2006500D00	User Manual (Simplified Chinese)
-	China RoHS
1960104726N001	Desk mounting kit
-	M.2&PCIe Expansion Brackets

Operating System

Part Number	Description
20706U20DS0053	Ubuntu Desktop 20.04 LTS
20706WS96S0006	Windows Server 2019 Standard 64bit

Optional Item for Default SKU

Part Number	Description
PCI-E-2221NP-00A1E	2-port 10GBase-T Ethernet PCI Express Server Adapter with Intel® X550 controller
PCI-E-2221NP-01A1E	1-port 10GBase-T Ethernet PCI Express Server Adapter with Intel® X550 controller
AM0-1029A	TPM2.0 Infineon SLB9670V2.0
1700021723-02	Power Cord UL 3P 15A 125V 183cm(IEC320-C19), USA type
1700023533-01	Power Cord EU 3P 16A 250V 183cm. EU type
1700023534-01	Power Cord BSI 3P 16A 250V 183cm, UK type
1700023536-01	Power Cord PSE 3P 20A 250V 183cm, PSE special connector*

WISE-DeviceOn

Edge AI OTA and Container Management

WISE-DeviceOn End-to-End Solution for Edge AI

Even if all datasets, algorithms, trainings, UI/UX, and more are functioning, how can you easily deploy an AI application to hundreds, or thousands, of inference devices in production? How can you efficiently manage AI models (software updates, CI/CD), in addition to all remote, hardware devices, such as sensors?



Solution Advantages



Performance Booster

- Inference optimization
- Open Neural Network Compiler (ONNC)
- Save over 45% DRAM consumption



Fleet Management

- Remote batch control for power management, reboot, terminal and screenshot
- Real-time monitoring, diagnostics and notification
- Over 10,000 devices around the globe



Container and OTA

- Streamlined deployment process
- Docker container management
- Software OTA (over-the-air) updates



AI Security

- AI containers deployed via Azure Container Registry and Harbor
- Secured data connection (TLS/SSL)
- Integrity protection based on digital signature

👉 Find More Information about [WISE-DeviceOn End-to-End Solution for Edge AI](#)