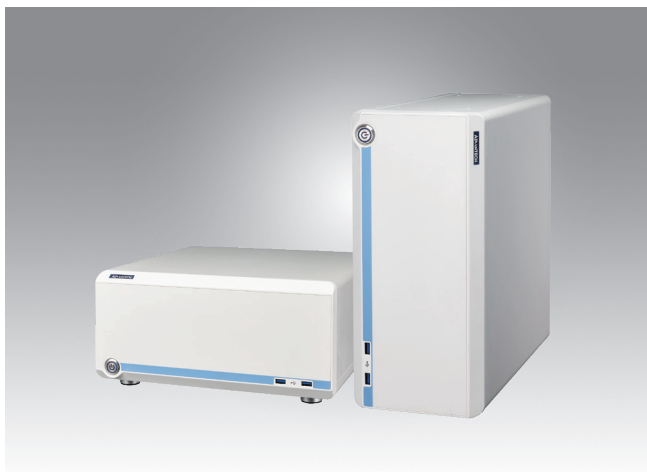


USM-500

Professional Tower/Standalone Medical Computer Intel 12th/13th/14th Generation Processor



Features

- Stylish and user-friendly outlook for hospital environment
- Support Intel® 12th/13th/14th Gen Core™ i7/i5/i3 processor with intel R680E
- Rich expansion for multi-purpose application
- Support Window 10/11/LTSC/Linux/NVIDIA AI (Clara SDK)
- M.2 2280 expansion slot
- HDMI and DP for multiple display used
- Support WISE-Device on
- Support Software RAID 0,1,5,10, TPM2.0



Introduction

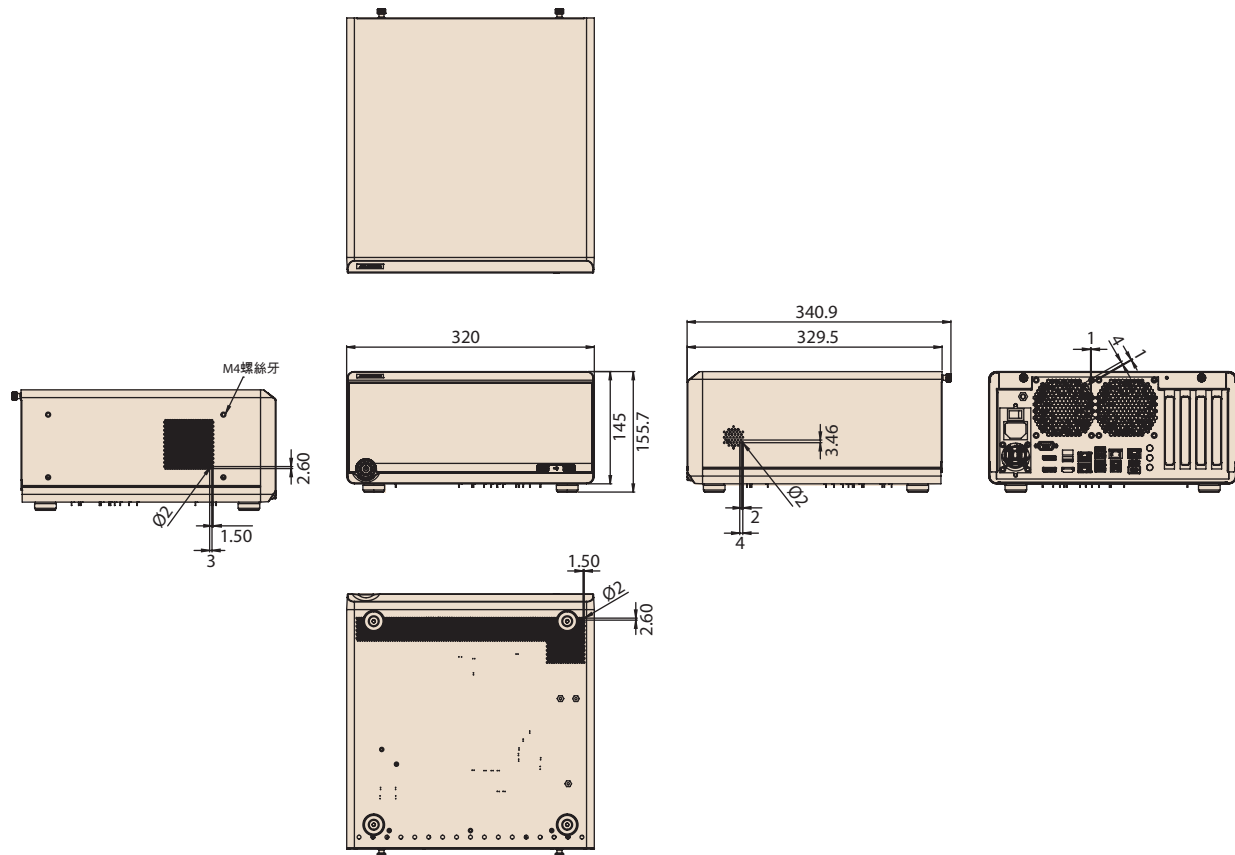
The industries first NVIDIA-Certified medical-grade computer aimed at providing AI at the edge for hospital applications and healthcare environments. This innovative Edge AI platform features support for the NVIDIA RTX -A6000 graphics card and NVIDIA's AI tools and frameworks like RAPIDS, Tensor RT and Triton Inference Server. The USM-500 efficiently utilizes two video capture cards and one NVIDIA graphics card to capture large video data while executing real-time AI algorithms and analysis.

Specifications

Processor	CPU	Intel 12 th /13 th /14 th Gen Processor (i3/i5/i7 TDP 65W)
	Chipset	Intel R680E
	Memory	4 slots U-DIMM sockets support up to 128GB DDR5 4800MHz
	Operating System	Windows 10 LTSC/ 11 Linux and windows 2021 server (By project base)
Expansion Slot	PCIe X4 (Gen3)	4GB/s per direction
	PCIe X8 (Gen3)	8GB/s per direction
	PCIe X16 (Gen5)	16GB/s per direction
	M.2 (M key)	1 (Type :2280 NVMe PCIe4 and SATA M.2 support)
	M.2 (E key)	1 (Type 2230 for WIFI)
	Serial	5 (5 x RS-232) 1 (1 x RS-232/422/485 with auto flow control)
Physical Characteristics	Dimension	320 x 329.5 x 145 mm (TBD)
Environment	Weight	10kg (TBD)
Graphics	HDMI	HDMI 2.0a 4096 x 2160 @ 60 Hz
	eDP	1, Internal pin header, support max. resolution 3840 x 2160 @ 60 Hz (Internal pin header)
	Display Port	Support max resolution 4096 x 2304 @ 60 Hz
Storage	HDD (2.5")/SSD	2.5" SATAIII 5KRPM 128M up to 2TB (Support 2 slot 2.5 HDD/SDD by BOM option)
	CD Drive (Optional)	SLIM 8X SATA DVD+/-RW DL BLACK (By project base)
I/O	HDMI	1
	Display Port	2
	RS232	1
	USB	12 (7 x USB 3.2 Type A (2 front,5 rear)/1 x USB 3.2 Type C/4 x USB 2.0 Type A)
	RJ45	4 (LAN1: 1GbE Intel I219-LM, LAN2: 2.5GbE Intel I226LM, LAN3: 2.5GbE Intel I226LM, LAN4: 2.5GbE Intel I226LM)
	Audio	3 (Line-in/Line-out/Mic-in)
	Speaker	3W
Power Supply	Input Voltage: 100-240V, 11.5-5.5A, 60-50Hz or 200-240V, 5.5A, 60-50Hz	
Warranty	2 years	
Certification	CE, FCC, CCC, IEC/EN 606061-1 3.2th, IEC/EN 60601-1-2 4.1th, RED	

Dimensions

Unit: mm



Order Information

Standard Model

Part Number	Description	PSU	CPU	Memory	HDD	SSD
USM-500-7400AA1	i7-12700E/16G/512GSSD	900W	i7-12700E	16G	x	512G

CTOS Service

Part Number	Description	PSU	CPU	Memory	HDD	SSD
USM-500-W4000AA1	USM-500 with 900W PSU Barebone	900W	x	x	x	x

500 barebone includes 2 SATA cable/ power cable(for HDD and SSD) , screw for HDD and M.2 device. Preliminary part number will be changed according to the latest status.

Component Offerings

12th CPU

Part Number	Description
96MPI5A-2.9-18M17	Core i5-12500E
96MPI7A-2.1-25M17A	Core i7-12700E
96MPI9A-2.3-30M17	Core i9-12900E

13th CPU

Part Number	Description
96MPI-13500E-14E	Core i5-13500E
96MPI-13700E-16E	Core i7-13700E
96MPI-13900E-24E	Core i9-13900E

2.5" SSD

Part Number	Description
SQF-S25V1-256GSDC	SQF 2.5" SATA SSD 650-D 256G 3D TLC (BiCS5) (0~70°C)
SQF-S25V2-512GSDC	SQF 2.5" SATA SSD 650-D 512G 3D TLC (BiCS5) (0~70°C)
SQF-S25V4-1TSDC	SQF 2.5" SATA SSD 650-D 1T 3D TLC (BiCS5) (0~70°C)

M.2 SSD

Part Number	Description
SQF-C8MV2-256GDEDC	SQF PCIe/NVMe M.2 2280 OPAL 720-D 256G 3D TLC BiCS5 (0~70°C)
SQF-C8MV2-512GDEDC	SQF PCIe/NVMe M.2 2280 OPAL 720-D 512G 3D TLC BiCS5 (0~70°C)
SQF-C8MV4-1TDEDC	SQF M.2 2280 720-D 1T 3D TLC BiCS5 (0~70°C)
SQF-C8MV4-2TDEDC	SQF M.2 2280 720-D 2T 3D TLC BiCS5 (0~70°C)

Cable

Part Number	Description
1700018705	Power Cord EU 3P 10A 250V 183cm
1702002600	Power Cord UL 3P 10A 125V 183cm
96CB-POWER-B-1.8MA	POWER CORD H05VV-F 3G 0.75MM 1.8M BK(G)_CN
1700023855-11	M Cable HDMI 19P(M)/HDMI 19P(M) 100cm w/ Lock
1700029605-01	200 cm DVI to DVI Cable

Capture card

Part Number	Description
DVP-7011HE-1	1Ch 3G-SDI PCIe video capture card with SDK
DVP-7012UHEL	1-ch 4k60 12G-SDI+HDMI PCIe Video Capture Card
XOLY-BDLKDVQDHDMI4	DeckLink Quad HDMI Recorder
XOLY-BDLKHCPR08K12	DeckLink 8K Pro capture card

DDR

Part Number	Description
SQR-UD5N8G4K8SNGBB	288pin UDIMM DDR5 4800 8GB 1.1v 1Gx16 (0~85°C)
SQR-UD5N16G4K8SNBB	288pin UDIMM DDR5 4800 16GB 1.1v 2Gx8 (0~85°C)
SQR-UD5N32G4K8SNBB	288pin UDIMM DDR5 4800 32GB 1.1v 2Gx8 (0~95°C)

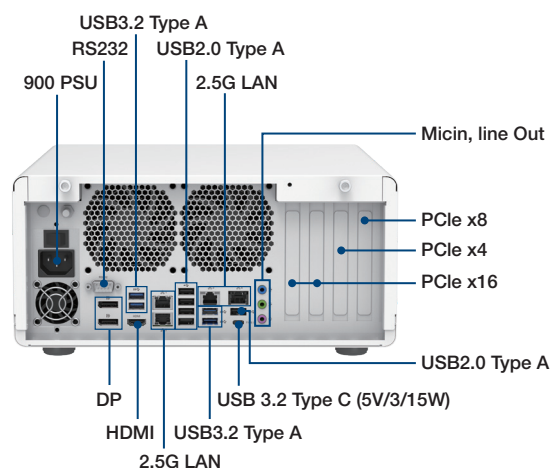
Graphic Card

Part Number	Description
SKY-QUAD-6000A-48	Quadro RTX 6000 Ada PCIe 48GB DSFH w/ATX BKT BUL
SKY-QUAD-4000A-20	Quadro RTX 4000 Ada PCIe 20GB SSFH w/ATX BKT BUL
SKY-QUAD-4500A-24	Quadro RTX 4500 Ada PCIe 24GB DSFH w/ATX BKT BUL
SKY-QUAD-5000A-32	Quadro RTX 5000 Ada 32GB PCI-Ex16 DP*4 FS BULK
SKY-QUAD-2000A-16	Quadro RTX 2000 Ada PCIe 16GB DSLP w/ATX BKT

WiFi Kit

Part Number	Description
EWM-W165M201E	Wi-Fi 6 + BT Module 2.4/5/6GHz M.2 2230 No.Vpro
EWM-W165M202E	Wi-Fi AX2106E 2230 M.2 Key E

I/O View



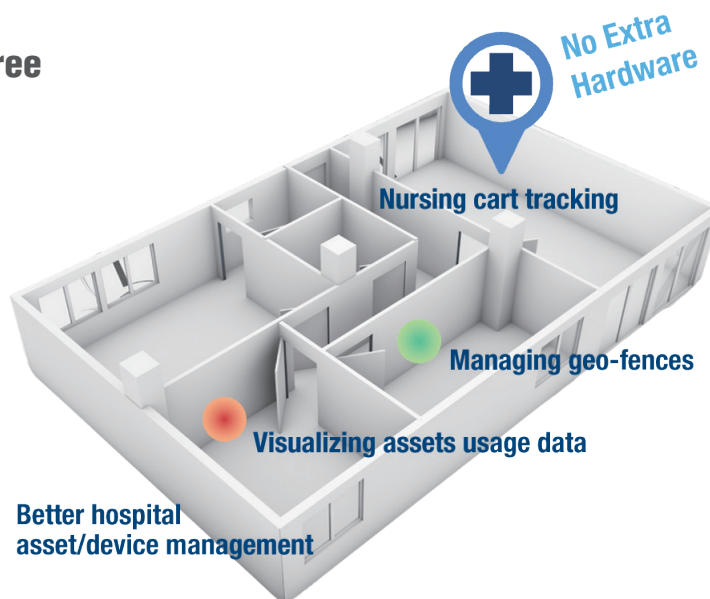
Software Add-ons

Device real-time location software

Wi-Fi RTLS infra-free

Seamlessly connect your edge computing devices into the RTLS system

Advantech Wi-Fi RTLS infra-free software enables immediate location tracking and status monitoring of devices. RTLS contributes to asset management, improves patient care efficiency, and ensures equipment is used sustainably. It also supports compliance with health and safety regulations.



Deploy Faster



Wi-Fi RTLS is a perfect fit for edge computing devices. By embedding the software, devices can seamlessly integrate into the RTLS system.

Order Information

Part Number	Description
31ASRTLSOF01B1	Android
31ASRTLSOF01B2	Windows
31ASRTLSOF01B3	Linux

Supported Models:
POC-4/6/8 series; USM-1/3/5 series ; HIT-3/5 series

Contact us

Email: AIH.service@advantech.com

Click the [link](#) to visit our product page for more details, or scan the QR code.

