

USM-501

Professional Tower/Standalone Medical Computer with Intel 9th Generation Processor



Features

- Stylish and user friendly outlook for hospital environment
- Support Intel® Xeon® 9th Gen Core™ i7/i5/i3 processor with intel Q370/C246
- Rich expansion for multi-purpose application
- Support Window 10 LTSC/Linux/nVidia AI (Clara SDK)
- M.2 2280/2230 expansion slot
- HDMI and DP for multiple display used
- Support WISE-Device on
- Support Software RAID 0,1,5,10, TPM1.2/2.0 (Optional)



Introduction

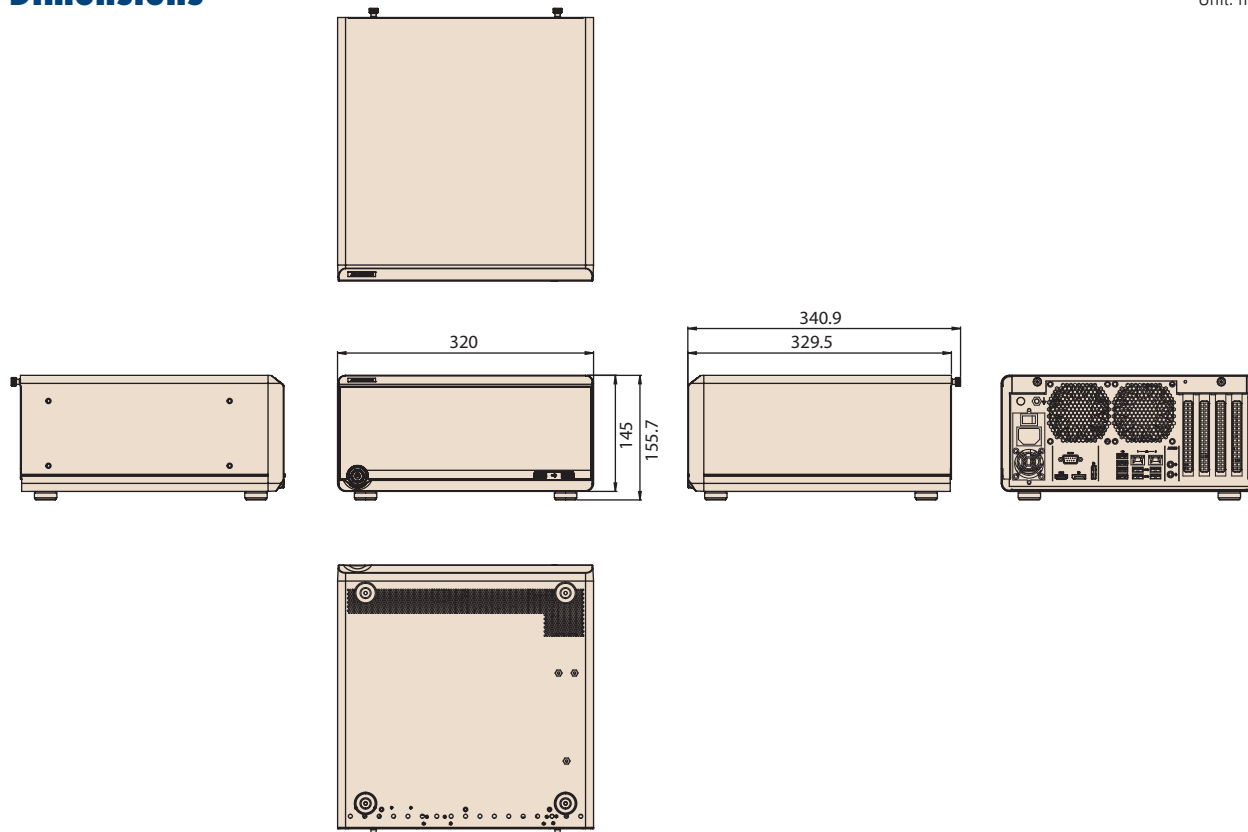
The industries first NVIDIA-Certified medical-grade computer aimed at providing AI at the edge for hospital applications and healthcare environments. This innovative Edge AI platform features support for the NVIDIA RTX -A6000 graphics card and NVIDIA's AI tools and frameworks like RAPIDS, Tensor RT and Triton Inference Server. The USM-501 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 9th Gen Processor (i5/i7 35W or 65W)
	Chipset	Intel Q370 Intel C246 (Optional for Xeon CPU)
	Memory	4 slots U-DIMM sockets support up to 128GB DDR4 2666MHz SDRAM (Intel Q370) 4 slots U-DIMM sockets support up to 128GB ECC/ 2666MHz SDRAM (Intel C246)
	Operating System	Windows 10 LTSC Linux and windows 2016 server (By project base)
Expansion Slot	PCIe X1	1GB/s per direction
	PCIe X4	4GB/s per direction
	PCIe X8(Gen3)	(BOM option, but only can choose 2 PCIe x8 or 1 PCIe x16 , default is PCIe x16)
	PCIe X16(Gen3)	16GB/s per direction
	M.2 (Mkey)	1 (Type :2280 NVMe PCIe4 and SATA M.2 support)
	M.2(E key)	1 (Type 2230 for WIFI)
Serial		5 (4 x RS-232, 1 x RS-232/422/485 with auto flow control)
		1 (1 x RS-232/422/485 with auto flow control)
Physical Characteristics	Dimension	320 x 329.5 x 145 mm
Environment	Weight	10kg
Graphics	HDMI	Support max resolution HDMI 1.2 1920 x 1200 @ 60 Hz (Colay HDMI 2.0a 4096 x 2160 @ 60 Hz, via BOM option)
	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	10 (4 x USB 3.1/2 x USB 3.0 /4 x USB 2.0)
	RJ45	2 (LAN1: Intel I219LLM ; LAN2 Intel I211AT))
Power Supply	Audio	2 (Line-in/Line-out)
		Input Voltage: internal PSU 100-240V 8-4A 47-63 Hz, maximum output power 500W Output Voltage: +3.3, 20A; +5V 20A; +12V1, 16A; +12V2, 16A; +12V3 16A; +5Vsb, 3A; -12V, 0.5A; -5V, 0.2A
Warranty		2 years
Certification		CE/FCC/CCC/IEC-60601-1/IEC-60601-1-2 4th, RED, KCC

Dimensions

Unit: mm



Order Information

Standard Model

Part Number	Description	PSU	CPU	Memory	HDD	SSD
USM-501-C278500	USM-501, 500W, i7, 8G DDR, 500G	500W	i7-9700E	8G	500G	x

CTOS Service

Part Number	Description	PSU	CPU	Memory	HDD	SSD
USM-500-W5000000S	USM-500/501 with 500W PSU Barebone	500W	x	x	x	x
USM-500-W5000000ST	USM-500/501 with 500W PSU Barebone (Made in Taiwan)	500W	x	x	x	x

501 barebone include 2 SATA cable/ power cable(for HDD and SSD) , screw for HDD and M.2 device.

Component Offerings

CPU

Part Number	Description
96MPI5CR-3.0-9M11T	Core I5-9500E(3G)
96MPI7CR-2.6-12M11	Core I7-9700E(2.6G)

2.5" HDD

Part Number	Description
96ND500G-ST-SG5KG	SG 2.5" 500G 5KRPM 7MM SATAIII 128MB
96ND1TB-ST-WD5KG	2.5 SATA 1TB
96ND2TB-ST-SG5KG1	2.5" 2TB SATAIII 128 MB

2.5" SSD

Part Number	Description
96FD25-S256-TS	SSSTC SEMI-WT SSD 256GB 2.5" SATA3 Tos 96 TLC
96FD25-S512-TS	SSSTC SEMI-WT SSD 512GB 2.5" SATA3 Tos 96 TLC
96FD25-S1TB-TS	SSSTC SEMI-WT SSD 1TB 2.5" SATA3 Tos 96 TLC

M.2 SSD

Part Number	Description
96FD80-N256-TS	SSSTC SEMI-WT SSD 256GB 2280 SATA3 Tos 96 TLC
96FD80-N512-TS	SSSTC SEMI-WT SSD 512GB 2280 SATA3 Tos 96 TLC
96FD80-N1TB-TS	SSSTC SEMI-WT SSD 1TB 2280 SATA3 Tos 96 TLC

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-ch Full HD H.264/MPEG4 PCIe video capture card with SDK
DVP-7011UHE	1-ch Full HD H.264/MPEG4 PCIe video capture card with SDK
DVP-7611HE	1ch HDV/SDI/CVBS/YPrPr/S-video PCIe HW card
DVP-7021HE	2ch HDMI/DVI/VGA/YPbPr/composite/S-video PCIe SW

DDR

Part Number	Description
AQD-D4U8GN26-SE	8G DDR4-2666 1GX8 1.2V SAM
AQD-D4U16N26-SE	16G DDR4-2666 1GX8 1.2V SAM
AQD-D4U32GN26-SB	32G DDR4-2666 2GbX8 1.2V SAM

Graphic Card

Part Number	Description
SKY-QUAD-RTX4000-B	RTX-4000 8G DDR6(160W) 3x DisplayPort 1.4
USM-QUAD-RTX5000	Quadro RTX-5000 with cable
USM-QUAD-RTXA6000	Quadro RTX-A6000 with cable
USM-RTX-A4000	Quadro RTX-A4000
USM-RTX-A5000	Quadro RTX-A5000 with cable

WiFi Kit

Part Number	Description
USM-500-RFK0E	USM-500/501 WiFi kit (Intel AC9260)

I/O View

