

USM-100H

Medical Mini Computer with Intel 12th Generation processor



Features

- 12th generation Intel® Core™ i7/i5 processor
- Fanless design for superior hygiene and infection control
- Equipped with Advantech's DeviceOn device management software
- Compatible VESA 75 x 75mm & 100 x 100mm
- Optional Wi-Fi 6E, Bluetooth 5.3



Introduction

USM-100H is equipped with an integrated NVME SSD that facilitates real-time data processing and storage. Compliant with IEC/EN60601-1-2 Medical EMC standards for electrical devices, USM-100H terminals are built for reliable operation in a wide range of healthcare environments.

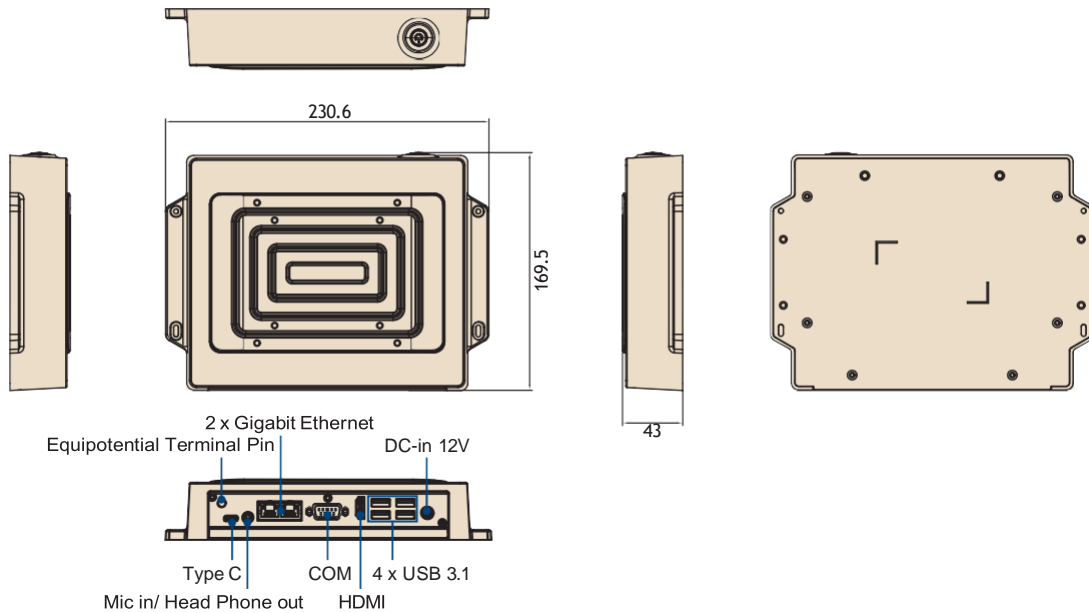
Moreover, USM-100H is equipped with Advantech's DeviceOn/iService software, which is a next-generation unified device management solution based on the WISE-DeviceOn platform. With support for batch operations and multi-device control, DeviceOn enables easy device configuration and deployment for convenient remote device management.

Specifications

Computing System	CPU	Intel® Core™ i5-1245UE 10cores,12M Cache, up to 4.40 GHz Intel® Core™ i7-1265UE 10cores,12M Cache, up to 4.70 GHz
	Memory	Memory (default) 8GB DDR5 (supports up to 32GB DDR5 SODIMM)
	Wi-Fi (M.2 2230)	1 (for Wi-Fi 6E)
	BlueTooth	BT5.3 (option)
	OS	(Optional) Win10 LTSC; Win 11 Pro; Ubuntu 20.04
Storage	Primary Storage	NVME M.2 SSD 256GB (Max. support 2TB)
I/O	DC in	x 1, DC 12V, max. 84W
	USB 3.1 Gen2 (Type A)	x 4
	USB 3 Type C	x 1 (For display only)
	COM, RS232	x 1
	HDMI	x 1
	LAN non-isolation	1G x 2
	Mic in/ Head phone out	x 1
Physical Characteristics	Dimensions (W x H x D)	169.5 x 230.6 x 43mm
	VESA Mount	100 x 100; 75 x 75mm
	Weight	1.5kg
Power Input	AC/DC	AC:100-240V, 96W, DC:12V, LOCK PLUG, Medical grade
Power Button	Power with LED indicator	x 1
Certificate	EMC & Safety Cert.	Medical CE, FCC, IEC/EN 60601-1-2 4.1 st , IEC/EN 60601-1 3.2 nd
Environment Temperature	Operating	0 ~ 35 °C/32 ~ 95 °F
	Storage	0 ~ 50 °C/32 ~ 122 °F
	Pressure	700-1060 hPa (Operation) 700-1060 hPa (Storage/Transportation)
Humidity	Operating	10 ~ 95%, 40 °C
	Storage	5 ~ 95%, 60 °C
Shock Resistance	10G peak acceleration (11ms duration)	
Warranty	System 2 years	

Dimensions

Unit: mm



Order Information

Part Number	Description	DRAM	SSD	WIFI
USM-100H-5400DA1	Core i5, 8G RAM, 512G M.2 SSD, DC In	8GB DDR5	512G M.2 SSD	Optional
USM-100H-7400DA1	Core i7, 16G RAM, 512G M.2 SSD, DC In	16GB DDR5	512G M.2 SSD	Optional

Power Cord

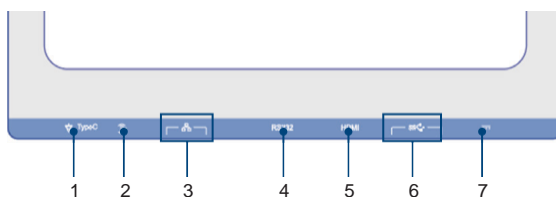
Region	Part Number (DC Model)
USA (Thailand, Philippines)	1702002600
Europe (Indonesia)	1702002605
UK (Singapore, Malaysia)	1700032693-11
Japan (PSE)	1700000237

Component Offerings

Memory

Part Number	Description
SQR-SD5N8G5K6SNGPB	SODIMM DDR5 5600 8GB 1Gx16 Samsung
SQR-SD5N16G5K6SNPB	SODIMM DDR5 5600 16GB 2Gx8 Samsung
SQR-SD5N32G5K6SNPB	SODIMM DDR5 5600 32GB 2Gx8 Samsung

I/O View



- 1. Type C
- 2. Mic in/ Head Phone out
- 3. LAN x 2
- 4. RS-232
- 5. HDMI
- 6. USB3.0 x 4
- 7. DC in

M.2 2280 SQF NVME

Part Number	Description
SQF-C8MV2-128GCEDC	SQF PCIe NVMe M.2 2280 OPAL 720-C 128G 3D TLC BiCS4 (0 ~ 70 °C)
SQF-C8MV2-256GCEDC	SQF PCIe NVMe M.2 2280 OPAL 720-C 256G 3D TLC BiCS4 (0 ~ 70 °C)
SQF-C8MV4-512GCEDC	SQF PCIe NVMe M.2 2280 OPAL 720-C 512G 3D TLC BiCS4 (0 ~ 70 °C)
SQF-C8MV4-1TCEDC	SQF PCIe NVMe M.2 2280 OPAL 720-C 1T 3D TLC BiCS4 (0 ~ 70 °C)
SQF-C8MV4-2TDEDC	SQF PCIe NVMe M.2 2280 OPAL 720-C 2T 3D TLC BiCS4 (0 ~ 70 °C)
SQF-C8BV2-128GCEDC	SQF PCIe NVMe M.2 2280 OPAL 720-C 128G 3D TLC BiCS4 (0 ~ 70 °C)
SQF-C8BV2-256GCEDC	SQF PCIe NVMe M.2 2280 OPAL 720-C 256G 3D TLC BiCS4 (0 ~ 70 °C)
SQF-C8BV4-512GCEDC	SQF PCIe NVMe M.2 2280 OPAL 720-C 512G 3D TLC BiCS4 (0 ~ 70 °C)
SQF-C8BV4-1TDEDC	SQF PCIe NVMe M.2 2280 OPAL 720-C 1T 3D TLC BiCS4 (0 ~ 70 °C)
SQF-C8BV4-2TDEDC	SQF PCIe NVMe M.2 2280 OPAL 720-C 2T 3D TLC BiCS4 (0 ~ 70 °C)

Wi-Fi + BT Module

Part Number	Description
EWM-W165M201E	Intel® Dual Band Wireless-AX210 (WiFi 6)
1751000449-01	PCB Ant. 2.4+5+6G WIFI 6E MHF4L/113LL BLK L250mm
1751000450-01	PCB Ant. 2.4+5+6G WIFI 6E MHF4L/113LL GRAY L150mm
1930001074*1	Screw M3x5L
1935020300*4	Screw M2x3L
1990027162N01*1	Thermal Pad 19.5X19.5X1.5

Bundle Selling with Medical-Grade Displays


Medical displays, PAX series, and box PCs, USM-100H operations work together to enable input/output of information, managing resources, and ensuring communication and security protocols for clinical application.

PAX series: Factory calibration included (choose either GAMMA or DICOM), user re-calibration supported

Part Number	Glass	Color
Display: PAX-121W-C2A-LFD	Clear Glass	White
Box PC: USM-100H-5400DA2	N/A	White
HDMI(1.2m): 1700023591-01	N/A	Black



Recommended Mounting Solution

Model Name	ARES-2421R
Part Number	ARES-2421R-HA74100
Photo	
Max. Support Weight	2 - 8kg
Max. Support Panel Size	≤ 27"
VESA Information	75 x 75 mm 100x100 mm

For more information, please click this link: <https://bit.ly/3T7dLMR>

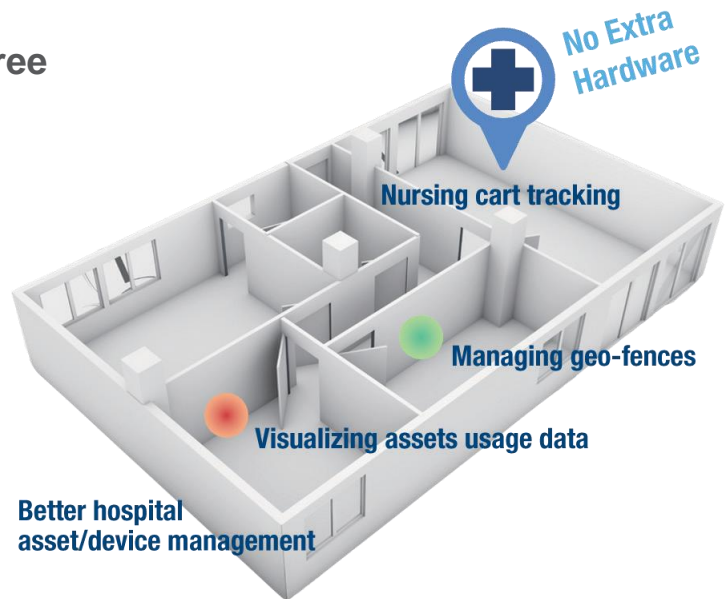
Software Add-ons

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.



DeviceOn

Unified Remote Device Management Software



Features

- Supports Advantech devices equipped with Windows, Android, and Linux OS
- Flexible device, location, user, and permissions management
- Enables remote monitoring and control of hardware, software, and peripherals
- Supports over-the-air (OTA) firmware and software updates
- Ensures quick, easy, and secure device onboarding
- RESTful APIs for third-party system integration

Introduction

Advantech's DeviceOn/iService is a next-generation unified device management solution based on the WISE-DeviceOn platform. Designed to enable centralized monitoring and remote management, DeviceOn/iService supports Advantech devices equipped with Windows, Linux, or Android operating systems. The software also supports the management of applications and integrated peripherals, such as a barcode scanner, card reader, camera, and printer. Users can remotely access and control connected devices, take screenshots, rollout OTA upgrades, and use remote desktop capabilities for troubleshooting from any location at any time. Moreover, DeviceOn/iService supports batch operations to facilitate the management of multiple devices simultaneously for easy and convenient device configuration and deployment.

Total Management



Devices & Hardware

- Windows, Linux, Android
- Hardware, storage, battery



Software & Peripherals

- Software monitoring & access
- Screens, USB devices, printers



Open for Expansion

- Peripheral integration
- Open APIs for integration

Remote Access



Real-Time Monitoring

- Connection/hardware status
- Software/peripheral status
- Failure notifications



Remote Controls

- Power controls
- Audio, backlight controls
- Software controls



Troubleshooting

- Screenshots
- Remote desktop support

Operational Efficiency



OTA updates

- System/software updates
- File repository management
- App store



Batch Controls

- 1-to-many batch reboot, etc.
- Time-saving tasks

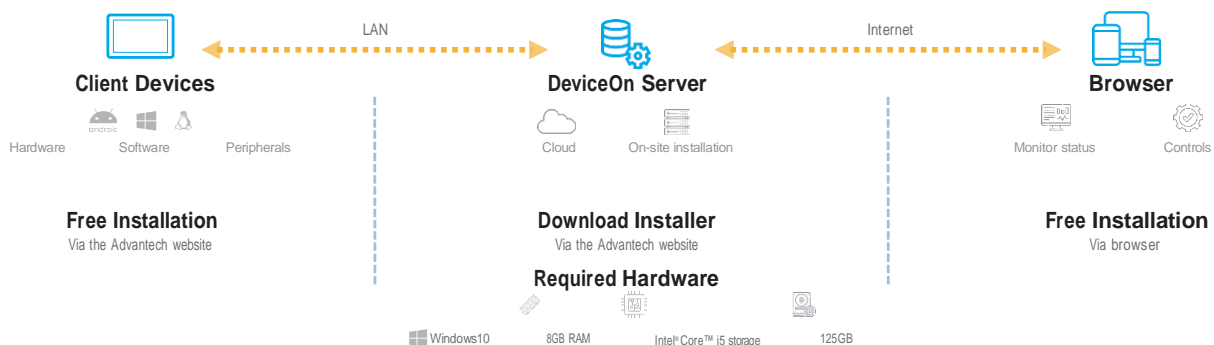


Setup Booster

- Software/peripheral watchlist
- Roles, rule templates

Note: Some functions may vary according to the product

System Architecture



DeviceOn/iService Specifications

DeviceOn/iService Remote Device Management	Operating System	Windows 10
	Common Controls (Reboot, Shutdown)	✓
	Remote desktop	✓(VNC)
	Device-Specific Controls (Audio, Backlight)	✓*
	Connection Status	✓
	Hardware Status	✓*
	Hard Disk Status	✓*
	Batch Operation Support	✓
	OTA Storage Management	FTP
	OTA Software Updates	✓
	Software Watchlist	✓
	Software Start/Stop	✓*
	* Dependant on device model	Peripherals Watchlist

Note:

1. DeviceOn/iService software must be downloaded from the Advantech website at <https://www.advantech.com/search/?q=DeviceOn%2FiService&st=support&sst=Utility>