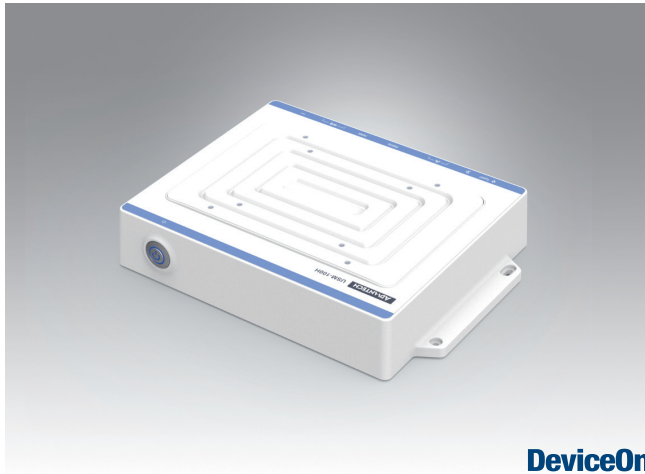


USM-100H

Medical Mini Computer with Intel 12th Generation processor



DeviceOn

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.

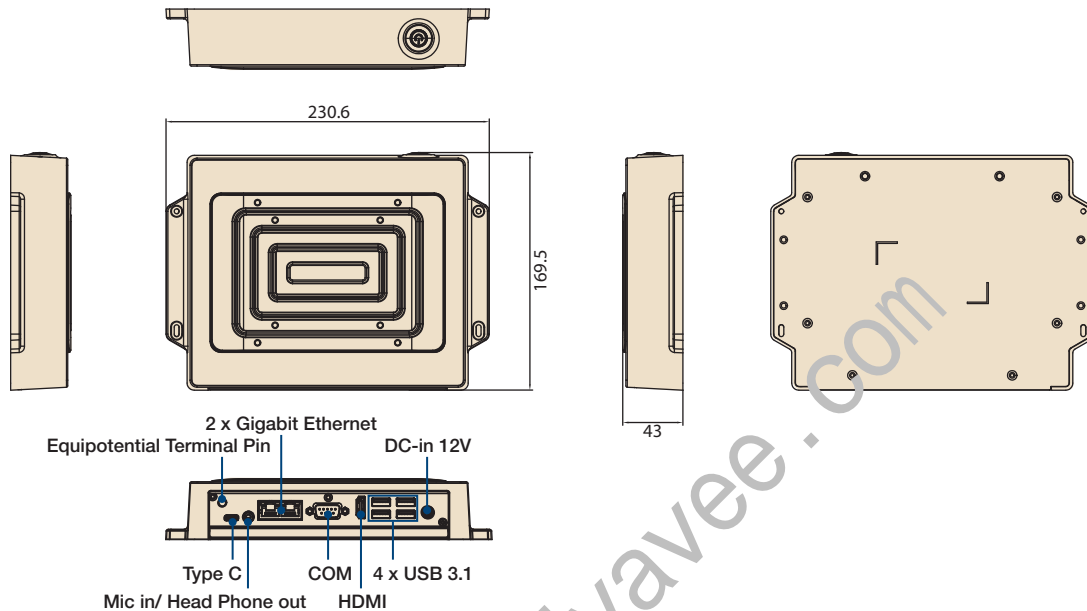
Moreover, USM-100H is equipped with Advantech's DeviceOn/iService software, which is a next-generation unified device management solution based on the WISE-DeviceOn platform. With support for batch operations and multi-device control, DeviceOn enables easy device configuration and deployment for convenient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

Specifications

| | | |
|--------------------------|---------------------------------------|--|
| Computing System | CPU | Intel® Core™ i5-1245UE 10cores,12M Cache, up to 4.40 GHz Intel® Core™ i7-1255UE 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/Bluetooth module, option) |
| | BlueTooth | BT5.2 (option) |
| | OS | Linux 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 3.1 Gen2 (Type C) | x 1 (for display only and also supports 4K) |
| | COM, RS232 | x 1 |
| | HDMI | x 1 (supports 4K) |
| | 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 th , IEC/EN 60601-1 3.2 th |
| Environment Temperature | Operating | 0 ~ 35 °C/32 ~ 95 °F |
| | Storage | 0 ~ 50 °C/32 ~ 122 °F |
| 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, DC In | 8GB DDR5 | Optional | Optional |
| USM-100H-7400DA1 | Core i7, 16G RAM, DC In | 16GB DDR5 | Optional | Optional |

Power Cord

| Region | Part Number (: Model) |
|-----------------------------|------------------------|
| USA (Thailand, Philippines) | 1702002600 |
| Europe (Indonesia) | 1702002600 |
| UK (Singapore, Malaysia) | 1700019704 |
| Japan (PSE) | 170000207 |

Component Offerings

Memory

| Part Number | Description |
|--------------------|--|
| SQR-SD5N8G4K8SNGBB | 262pin SODIMM DDR5 4800 8GB 1.1v 1Gx16 (0 ~ 85 °C) Samsung |
| SQR-SD5N16G4K8SNBB | 262pin SODIMM DDR5 4800 16GB 1.1v 2Gx8 (0 ~ 85 °C) Samsung |
| SQR-SD5N32G4K8SNBB | 262pin SODIMM DDR5 4800 32GB 1.1v 2Gx8 (0 ~ 85 °C) Samsung |
| SQR-SD5N8G4K8MNGAB | 262pin SODIMM DDR5 4800 8GB 1.1v 1Gx16 (0 ~ 85 °C) Micron |
| SQR-SD5N16G4K8MNAB | 262pin SODIMM DDR5 4800 16GB 1.1v 2Gx8 (0 ~ 85 °C) Micron |
| SQR-SD5N32G4K8MNAB | 262pin SODIMM DDR5 4800 32GB 1.1v 2Gx8 (0 ~ 85 °C) Micron |

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) |

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>

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

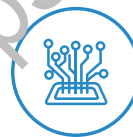
- Peripheral integration
- Open APIs for integration

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

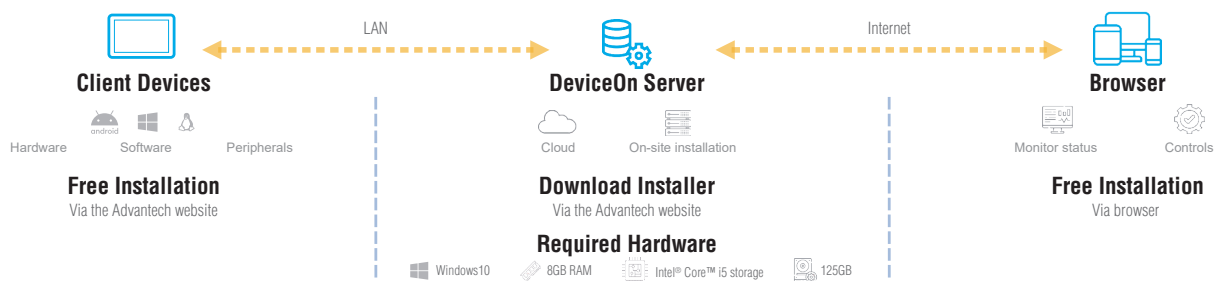


Setup Booster

- 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 | ✓* |
| | Peripherals Watchlist | ✓* |

* Dependant on device model

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>

<https://advavee.com/>