

POC-421

21" Point-of-Care Terminal with 12th Generation Intel® Processor



Features

- 12th generation Intel® Core™ i5/celeron processor
- 21.5" full HD display with multi-touch P-CAP control
- M.2 expansion slots for integrating add-on modules
- Fanless design with upgrade IP54-rated protection for superior hygiene and infection control
- Equipped with Advantech's DeviceOn device management software
- Optional Wi-Fi 6, Bluetooth, Dual RFID, smart card reader and auto-focus 5 megapixel camera



Introduction

POC-421 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, POC-421 terminals are built for reliable operation in a wide range of healthcare environments.

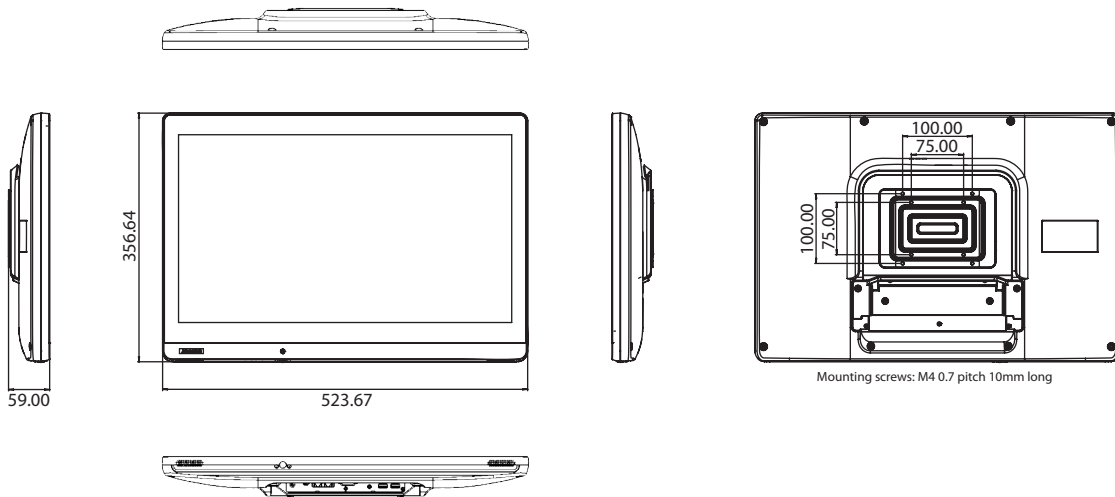
Moreover, POC-421 is equipped with Advantech's DeviceOn/iService software, which is a next-generation unified device management solution based on the WISE-DeviceOn platform. With support for batch operations and multi-device control, DeviceOn/iService enables easy device configuration and deployment for convenient remote device management.

Specifications

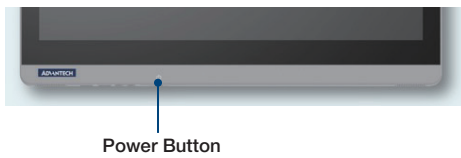
System	Processor*	Intel® Core™ i5-1245UE 10cores,12M Cache, up to 4.40 GHz Intel® Celeron 7305E 5cores 8M Cache, 1.00 GHz
	Memory (default)	Memory (default) 8GB DDR5 (supports up to 32GB DDR5 SODIMM) Operating System (optional) Windows 10 IoT Ent (64 bits only); Windows 11 IoT Ent (64 bits only)
Storage	Primary Storage (optional)	NVME M.2 SSD 256GB (M.2 2280)
Display	Size	21.5 inch
	Max. Resolution	1920 x 1080
Touch	Type	10-point multi touch P-CAP (clear glass);
I/O	USB 3.1 Gen 2 (Type A)	4
	USB 3 Type C	1
	HDMI	1
	Mic in/ Head phone out	1
	LAN non-isolation	2
	COM (RS232)	1
Expansion Slots	M.2 2230 E. Key	1 (for Wi-Fi 6E /Bluetooth 5.3 module)
Other Functions	Speaker	2 x 2W
	Camera	1 x 5 megapixel (optional)
	TPM 1.2/2.0	2.0 (default via software)
Power Input	DC/AC	DC 12V, max. 84W
IP Rating	Front Panel	IP65
	System	IPX1 (IP54 optional)
Authentication Solution (Choose 1)	RFID Reader	Optional (choose either RFID or smart card reader)
	Smart Card Reader**	Optional (choose either RFID or smart card reader)
Certification	EMC & Safety	Medical CE: EMC (IEC 60601-1-2, 4th Edition) & Safety IEC/EN 60601-1, FCC Part 15
Physical Characteristics	Dimensions (W x H x D)	524 x 357 x 62 mm/20.63 x 14.06 x 2.44 in
	Weight	6.29 kg/13.86 lb
	VESA Mount	100 x 100; 75 x 75 mm
Environment	Temperature	0 ~ 35 °C/32 ~ 95 °F (Operating) 0 ~ 50 °C/32 ~ 122 °F (Storage)
	Humidity	10~95% ,40°C (Operating) 5~ 95% ,60°C (Storage)
	Shock Resistance	10G peak acceleration (11ms duration)
Warranty	System	3 years

Dimensions

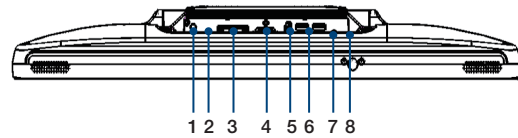
Unit: mm



Front Function Keys



I/O Ports

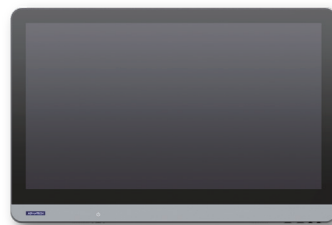


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|---------------------------|-------------------------------|
| 1. 1 x USB Type C | 5. HDMI |
| 2. Mic in/ Head phone out | 6. 4 x USB 3.1 |
| 3. 2 x Gigabit Ethernet | 7. DC-In 12V |
| 4. 1 x COM Port (RS232) | 8. Equipotential Terminal pin |

Multimodal



All-in-One PC



Touch Display (PAX-1)



Box PC (USM-100)

CTOS Service

Ordering Information

Grade	Part number	Description	DRAM	Touch	SSD	WIFI
Medical	POC-421-12B00D-CE	21.5", Core i5, 8G RAM, 256G NVME, WIFI, IPX1, P-CAP Touch, MDR	8GB DDR5	P-CAP	256G	WIFI 6E & Bluetooth5.3
Medical	POC-421-12B000-CE	21.5", Core i5, Bare BOM, IPX1, P-CAP Touch, MDR	N	P-CAP	N	N

WIFI, IP54, Touch Display Modules

Part Number	Description	Grade
POC-42X-WF3E	POC-4,AX210,WIFI6E,BT5.3,Antenna,RF-RED	Global/RED
98R8POC4030	POC-424,IP54,waterproof suite kit package	Global/IP54
98R8POC4080	POC-421,IP54,waterproof suite kit package	Global/IP54
98R8POC4040	POC-4,21.5" Touch display module,W/Cover	Global
98R8POCS050	POC-4,23.8" Touch display module,W/Cover	Global


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

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 (Focus)	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-C8MV4-2TCEDC	SQF PCIe/NVMe M.2 2280 OPAL 720-C 2T 3D TLC BiCS4 (0 ~ 70 °C)
SQF-C8BV2-128GDEDM	SQF PCIe/NVMe M.2 2280 OPAL 720-D 128G 3D TLC BiCS5 (-20 ~ 85 °C)
SQF-C8BV2-256GDEDM	SQF PCIe/NVMe M.2 2280 OPAL 720-D 256G 3D TLC BiCS5 (-20 ~ 85 °C)
SQF-C8BV2-512GDEDM	SQF PCIe/NVMe M.2 2280 OPAL 720-D 512G 3D TLC BiCS5 (-20 ~ 85 °C)

Recommended Mounting Solution

Model Name	ARES-2423R	ARES-2421R
Part Number	ARES-2423R-A741L00	ARES-2421R-HA74100
Photo		
Max. Support Weight	6 - 12kg	2 - 8kg
Max. Support Panel Size	≤ 27"	≤ 27"
VESA Information	75 x 75 mm 100x100 mm	75 x 75 mm 100x100 mm

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

DeviceOn/iService

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

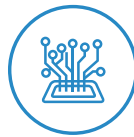
- Peripheral integration
- Open APIs for integration

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

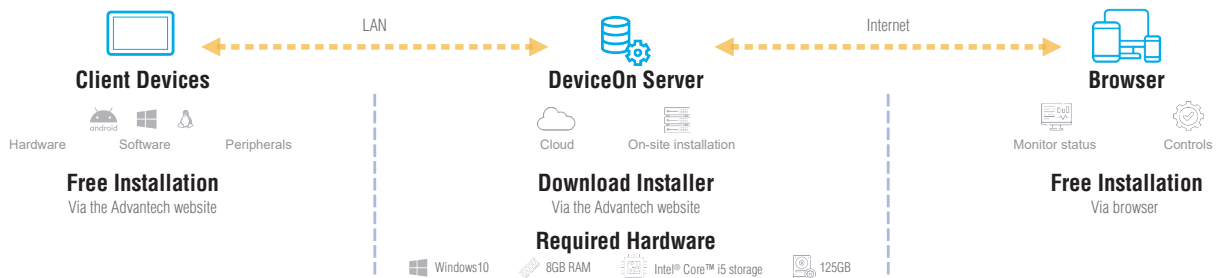


Setup Booster

- 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>