

UTC-520

21.5" Ubiquitous Touch Computer UTC-520H with 8th Gen Intel Core i7/i5/i3 Processor



DeviceOn/iService

Features

- Low power and fanless system design
- Built-in Intel® Core™ i5-8365UE (UTC-520H default)
- 21.5" monitor with 16:9 widescreen display
- IP65-rated front panel for water and dust resistance
- All in one aluminum extrusion design
- Supports both landscape and portrait screen orientations
- VESA 100 mm standard mounting holes for varied mounting demands
- Side groove design for flexible peripheral installation
- Optional 400 nit LCD panel
- Support DeviceOn/iService software for remote device management



Introduction

UTC-520 features an all-in-one computing system equipped with wide format, touch based LCD panel. It is easy to integrate key peripherals and display systems for diversified self-service and interactive signage deploy in different application areas. The systems deliver updated information with well-designed interactive interfaces, fully ensure relevant content and targeted promotions are delivered. UTC series touch panel computers are the best investments to enhance user satisfaction, further brand equity, and maximize business profits. Advantech's DeviceOn/iService is a next-generation unified device management solution based on the WISE-DeviceOn platform.

Moreover, Advantech DeviceOn/iService Software is a next-generation unified device management 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

Model	UTC-520H	
Processor System	CPU	Intel® Core™ i3-8145UE Intel® Core™ i5-8365UE (Default) Intel® Core™ i7-8665UE
	Base Frequency	1.60 GHz (i5-8365UE/Quad-Core)
	Cache	L3 Cache 6MB
	Memory	1 x 260 pin SO-DIMM DDR4-2400 up to 32GB
	HDD	1 x 2.5 internal SATA HDD bay
	Network (LAN)	2 x Gigabit Ethernet Ports, Intel I210IT; Intel I219LM (supports Wake on LAN)
	I/O ports	2 x RS-232 COM (RS-422/485 optional) 4 x USB 3.1 2 x Gigabit Ethernet (RJ-45) 1 x HDMI 1 x Audio Line-out 1 x Mic-in
	Stereo Speaker	2 x 3W
	Bus expansion	1 x M.2 E-key 2230 1 x M.2 B-key 2280 (NVMe PCIe x 4) / M.2 B-Key 3042 LTE module supports USB 2.0 only (optional)
	Mounting	VESA 100 x 100
	Dimensions (W x H x D)	517.6 x 313.5 x 43.5 mm
	Weight	8 kg (17.6 lb)
	OS Support	Windows 10 IoT Enterprise Linux Ubuntu 22.04
Environmental Specifications	Operating Temperature	0 ~ 40° C (32 ~ 104° F)
	Relative Humidity	95% @ 40° C non-condensing
	Vibration	Operating 10G peak acceleration (11ms duration), follow IEC 60068-2-27
	Shock	Operating Random Vibration Test 5 ~ 500Hz, 1Grms @with HDD; 2Grms @with SSD, follow IEC 60069-2-64
	EMC/ Safety	CE (RED Compliance), EN 61000-6-2: 2005 /AC: 2005, FCC, UL, CB, CCC, BSMI
	Front Panel Protection	IP65/ NEMA4 compliant

Specifications (Cont.)

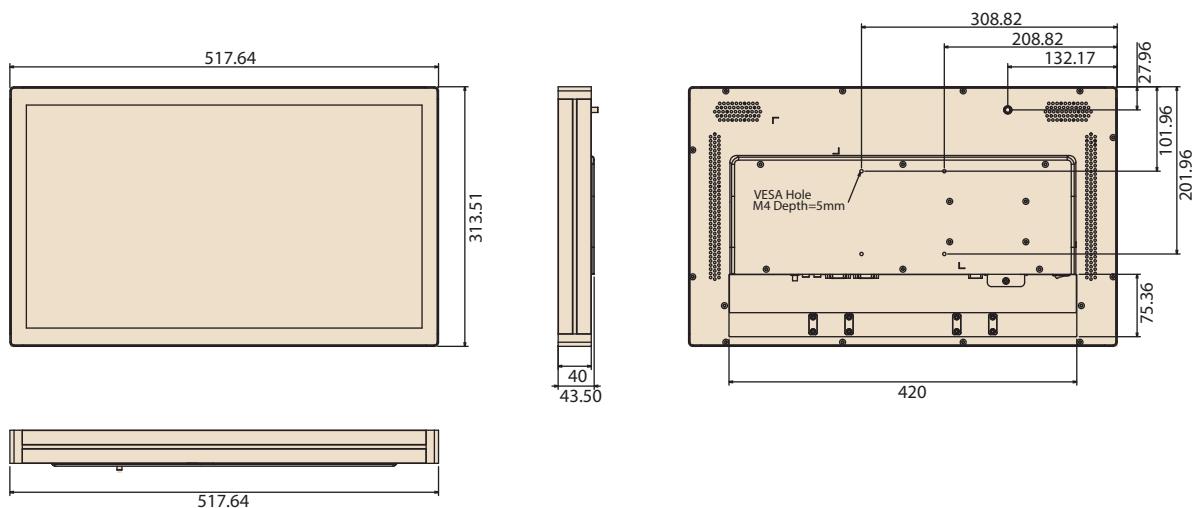
Power Supply	Input Voltage	12V _{DC}
	Adapter	12V, 7 A (84W ITE adapter)
	Power consumption	Typical 40W Max 50W
LCD Display	Size/Type	21.5" TFT LCD with LED backlight
	Max.Resolution	1920 x 1080
	Max. Color	16.7M
	Pixel Pitch (um)	248.25 x 248.25
	Brightness (cd/m ²)	250 nits (400 nits optional)
	View Angle	178°/178°
Touch Screen Option (PE/RE/GE)	Type	Projected capacitive, Single point Analog Resistive 5-wires touch
	Light Transmission	88% ± 2%, 80% ± 3%
	Controller	USB interface
DeviceOn/iService Remote Device Management	Operating System	Windows 10
	Common Controls (Reboot, Shutdown)	✓
	Remote desktop	✓ (VNC)
	Audio Controls	✓*
	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: DeviceOn/iService software must be downloaded from the Advantech website at <https://www.advantech.com/search?q=DeviceOn%2FiService&st=support&ssl=Utility>

Dimensions

Unit: mm



Ordering Information

Part Number	Description
UTC-520H-PE	21.5" 9H PCT.T/S with Intel® Core™ i5 8365U, 8GB RAM, IT Adapter
UTC-520HP-ATB0E	21.5" 7H PCT.T/S with Intel® Core™ i5 8365U, 8GB RAM, IT Adapter
UTC-520HR-ATB0E	21.5" Resi. T/S with Intel® Core™ i5 8365U, 8GB RAM, IT Adapter
1702002600	Power Cord 3P UL/CSA(USA) 125V 10A 1.83M 180D
1702002605	Power Cord 2P FRANCE 10A/16A 220V 1.83M 90D
170000596	Power cable, CCC, 3P, 10A, 250V, 183 cm (China)
1700018704	Power cable, BSI, 2P, 10A, 250V, 180 cm (UK)
1960069544N001	I/O cover for UTC-520 series

Peripherals for UTC-500 Series (by Request)

Part No.	Description
UTC-P01-A1E	5M Camera Module For UTC-5XX (USB connection)
UTC-P02-A0E	Magnet Strip Reader For UTC-5XX (USB connection)
UTC-P03-A1E	RFID Reader For UTC-5XX (USB connection)
UTC-P06-A2E	Smart Card Reader For UTC-5XX (USB connection)
UTC-P07-A4E	2D Barcode Module (Honeywell) for UTC-500 Series (USB connection)

Optional Accessories (by Request)

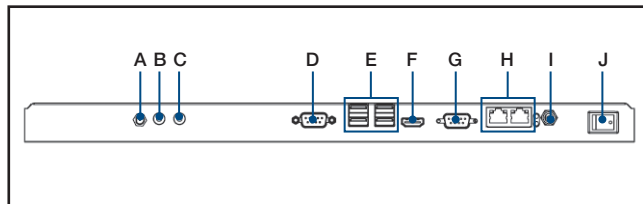
Part No.	Description
96PD-00824	UTK-700 Desktop Stand (w/o Printer)
96PD-00825	UTK-700 Extension Tower (For 96PD-00824 only)
UTC-T01-STAND	Triangle shape floor stand
UTC-H01-STANDE	H-shaped floor stand
ARES-2424X-S170201	Table Stand, 100x100/75x75
ARES-12250-L101000	Wall Mount, 75/100mm

UTC-520H WiFi Ordering Information

Part No.	Description
UTC-WIFI-A5E	AIW-163BR 802.11ax with BT, PCIe-USB, Realtek 8852BE, M.2 2230
UTC-WIFI-A6E	EWM-W179,802.11ax/ac/b/g/n, 2T2R, BT5.2, M.2

Fully- Integrated I/O

UTC-520H



- A. Antenna port
- B. Line-out
- C. Mic-in
- D. COM2
- E. 4 x USB 3.1
- F. HDMI
- G. COM1
- H. 2 x LAN
- I. DC-in
- J. Power switch

DeviceOn/iService

Unified Remote Device Management Software



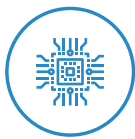
Features

- 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

