

# UTC-520

## 21.5" Ubiquitous Touch Computer UTC-520I with 11th Gen Intel Core i7/i5/i3 Processor



DeviceOn/iService



### Features

- Low-power, fanless system design
- Built-in Intel® Core™ i5-1145G7E (UTC-520I)
- 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 integrating peripherals
- Optional 400-nit LCD panel
- Support DeviceOn/iService software for remote device management
- i3 and i7 sku are available for I platform
- I platform supports TPM 2.0

### Introduction

UTC-520 is an all-in-one computer with an Intel® Core™ i5-1145G7E processor, widescreen LCD touch panel, and side groove design for integrating optional peripherals. Designed for diverse self-service, content broadcasting, and interactive signage applications, UTC-520 systems can be deployed in a wide range of usage scenarios for enhancing customer satisfaction, furthering brand equity, and maximizing 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 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-520I   |   |
|------------------|--|---|
| System           | CPU  | i5-1145G7E (Default)<br>Intel® Core™ i3-1115G4E<br>Intel® Core™ i7-1185G7E  |
|                  | Base Frequency   | 1.50/ 2.6 GHz/ Quad Core  |
|                  | Cache  | L3 Cache 8MB  |
|                  | Memory   | 2 x 260 pin SO-DIMM DDR4-3200 up to 64GB  |
|                  | HDD  | 1 x 2.5 internal SATA HDD bay   |
|                  | Network (LAN)  | 2 x GbE, LAN1: Intel i219LM, LAN2: Intel i210AT/IT (supports Wake on LAN)   |
|                  | I/O  | 2 x GbE, LAN1: Intel i219LM, LAN2: Intel i210AT/IT  |
|                  |  | 1 x HDMI / 1 x DP   |
|                  |  | 1 x Audio Line-out  |
|                  |  | 1 x Mic-in  |
| Mechanical       | Stereo Speaker   | 4 x USB3.2 Gen. 2x1 10Gbps<br>1 x USB type-C, USB3.2 Gen. 2x2 20Gbps, support DP1.4a via Alt. Mode<br>2 x RS-232 COM (RS-422/485)*<br>2 x 3W            |
|                  | Expansion  | 1 x M.2 E-Key 2230 (PCIe x 1, USB2.0, I2C)<br>1 x M.2 B-Key 3042 (USB2.0) w/ Nano-SIM<br>1 x M.2 M-Key 2280 (PCIe x4 Gen.4 for PCIe SSD), optional SATA |
|                  | Mount Options  | VESA 100 x 100 mm   |
|                  | Dimensions (W x H x D)   | 517.6 x 313.51 x 43.5 mm  |
|                  | Weight   | 8 kg (17.6 lb)  |
| Board Features   | Watchdog Timer   | 65536 intervals, 0 ~ 65535 sec  |
|                  | TPM  | TPM2.0 (SLB9670XQ2.0)   |
| Operating System | Win 10 IoT Enterprise, Win 11 IoT Enterprise, Android 14, Ubuntu 22.04 |   |
| Environmental    | Operating Temperature  | 0 ~ 40 °C/32 ~ 104 °F   |
|                  | Relative Humidity  | 95% @ 40 °C/104 °F, non-condensing  |
|                  | Shock  | Operating 10G peak acceleration (11ms duration), follow IEC 60068-2-27  |
|                  | Vibration  | 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 rated/NEMA4 compliant  |

## Specifications (Cont.)

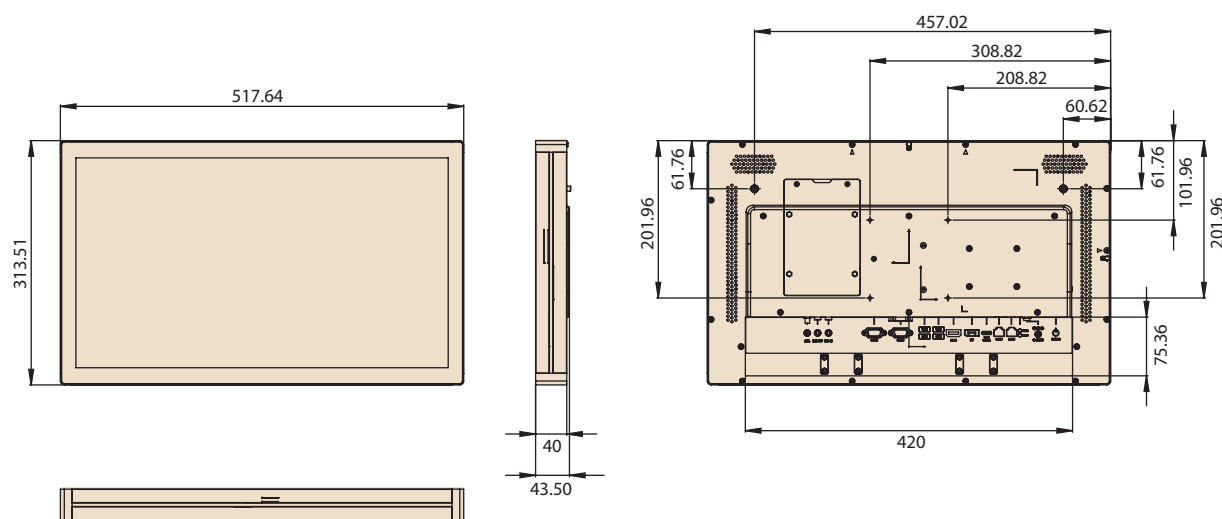
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|--|------------------------------------|---|
| Power Supply                                     | Input Voltage                      | 12V <sub>DC</sub>   |
|  | Adapter                            | 12V, 7 A (84W ITE adapter)  |
|  | Power Consumption                  | Typical 40W<br>Max 50W  |
| LCD Display                                      | Size/Type                          | 21.5" TFT LCD with LED backlight                                  |
|  | Max.Resolution                     | 1920 x 1080   |
|  | Max. Color                         | 16.7M   |
|  | Pixel Pitch (H x V)                | 248.25 x 248.25   |
|  | Brightness                         | 250 nits (400 nits optional)                                      |
| Touchscreen (PE/RE)                              | Viewing Angle                      | 178°/178°   |
|  | Type                               | Projected capacitive, Single point Analog Resistive 5-wires touch |
|  | Light Transmission                 | 88% ± 2%, 80% ± 3%  |
| DeviceOn/iService<br>Remote Device<br>Management | Controller                         | USB interface   |
|  | 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&sst=Utility>

## Dimensions

Unit: mm



Ordering Information

| Part Number     | Description  |
|-----------------|--|
| UTC-520I-PE     | 21.5" 9H PCT.T/S with Intel® Core™ i5-1145G7E, IT Adapter          |
| UTC-520IP-ATB0E | 21.5" 7H PCT.T/S with Intel® Core™ i5-1145G7E, 8GB RAM, IT Adapter |
| UTC-520IR-ATB0E | 21.5" Resi. T/S with Intel® Core™ i5-1145G7E, 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                        |
| 1700000596      | 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

| Part Number | Description                             |
|-------------|---|
| UTC-P01-A1E | 5MP camera module (via USB)             |
| UTC-P03-A1E | RFID/NFC reader (via USB)               |
| UTC-P06-A2E | Smart card reader (via USB)             |
| UTC-P07-A4E | 2D barcode module (Honeywell) (via USB) |

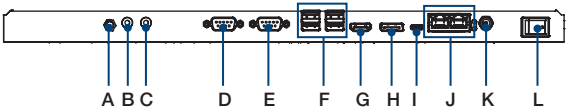
Optional Accessories

| Part No.           | Description                                   |
|--------------------|---|
| 96PD-00824         | UTK-700 Desktop Stand (w/o Printer)           |
| 96PD-00825         | UTK-700 Extension Tower (For 96PD-00824 only) |
| UTC-520-STAND1E    | Desktop stand for UTC-515/520                 |
| UTC-T01-STANDE     | 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-520 WiFi Ordering Information

| Part No.     | Description   |
|--------------|---|
| UTC-WIFI-A5E | AIW-163BR 802.11ax with BT5.2, PCIe-USB, Realtek 8852BE, M.2 2230 |

Fully Integrated I/O



- A. Antenna Port

B. Line-out

C. Mic-in

D. COM2

E. COM1

F. USB 3.2 x 4
- G. HDMI

H. DP

I. USB type c

J. LAN Ports x 2

K. DC input

L. Power Switch

# DeviceOn/iService

## Unified Remote Device Management Software



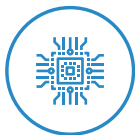
### Features

- 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

