# UTC-520

**NEW**

**DeviceOn/iService**

## Features

- Low-power, fanless system design
- UTC-520G with Intel® Pentium® N4200
- UTC-520H with Intel® Core™ i5-8365UE
- 21.5" monitor with 16:9 widescreen display
- IP65-rated front panel for water and dust resistance
- All-in-one aluminum extrusion design
- Supports landscape and portrait screen orientations
- VESA (100 x 100) mount holes
- Side groove design for integrating peripherals
- Single-chip watchdog timer with 255 intervals
- Optional custom anti-glare surface
- Optional 400-nit LCD panel
- Support DeviceOn/iService software for remote device management

Microsoft® Windows® Embedded    CCC    UL    CE    FCC    RoHS COMPLIANT 2002/95/EC

## Introduction

UTC-520 is an all-in-one computer with an Intel® Core™ i5-8365UE processor, widescreen LCD touch panel, and side grove 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 enhance customer satisfaction, furthering brand equity, and maximizing business profits. Advantech's DeviceOn/iServiceis a next-generation unified device management solution based on the WISE-DeviceOnplatform.

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
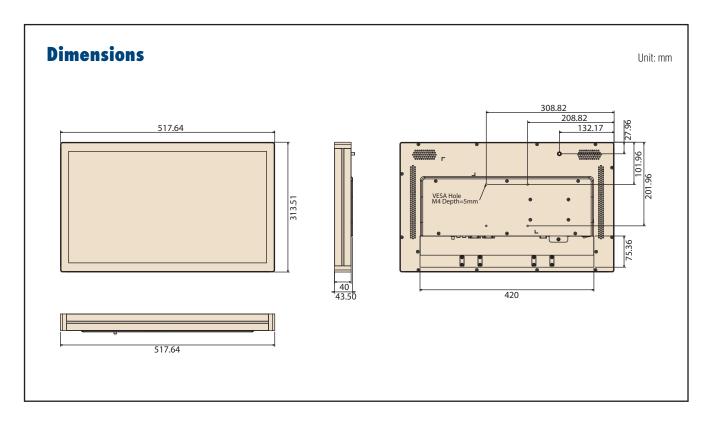
## Specifications

| Model | | UTC-520H | UTC-520G |
|---|---|---|---|
| System | CPU | Intel® Core™ i5-8365UE(UTC-520H) | Intel® Pentium® N4200 (UTC-520G) |
| | Base Frequency | 1.60 GHz (quad-core) | 1.1 GHz (N4200/Quad-Core) |
| | LLC | 6MB | 2MB |
| | Memory | Dual channel/dual socket DDR4 2400 Mhz, up to 32GB | Single Channel /single socket DDR3L 1867 MHz up to 8GB |
| | HDD | 1 x 2.5" internal SATA HDD bay | 1 x 2.5 internal SATA HDD bay |
| | Network (LAN) | 2 x Gigabit Ethernet (supports Wake-on-LAN) | 2 x Gigabit Ethernet ports (Supports Wake on LAN) |
| | I/O | 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 | 2 x RS-232 COM (RS-422/485)* 2 x USB2.0/ 2 x USB3.0 2 x Gigabit Ethernet (RJ-45) 1 x VGA & 1 x HDMI Audio Line-out x 1, Mic-in x 1 |
| | Stereo Speaker | 2 x 3W | |
| | Expansion | 1 x M.2 E-key 2230 1 x M.2 B-key 2280 (NVMe PCIe x2), 3042 LTE module (supports USB 2.0 only) (optional M-key 2280 NVMe PCIe x4) | Full-size MiniPCIe / M.2 |
| Mechanical | Mount Options | VESA (100 x 100) | |
| | Dimensions (W x H x D) | 517.64 x 313.51 x 43.5 mm/20.37 x 12.34 x 1.71 in | |
| | Weight | 8 kg/17.6 lb | |
| Board Features | Watchdog Timer | 65536 intervals, 0 ~ 65535 sec | |
| | TPM | TPM2.0 (SLB9670XQ2.0) | N/A |
| Operating System | | Windows 10 IoT Enterprise Linux Ubuntu 18.04 | Win 10 IoT Enterprise Android 10 Linux Ubuntu 18.04 |
| Environmental | Operating Temperature | 0 ~ 40 °C/32 ~ 104 °F | |
| | Relative Humidity | 10 ~ 95% @ 40 °C/104 °F, non-condensing | |
| | Vibration | 0.5G | |
| | Shock | 5G peak acceleration (11 msec) | |
| | EMC/Safety | CE, FCC, UL, CB, CCC, BSMI | |
| | Front Panel Protection | IP65 rated/NEMA4 compliant | |
| Power Supply | Input Rating | 12~24V, 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 (H x V) | 248.25 x 248.25 µm | |
| | Brightness | 250 cd/m² (400 cd/m² optional) | |
| | Viewing Angle | 178°/178° | |
| Touchscreen (PE/RE/GE) | Type | Projected capacitive (PCAP) touch, anti-glare surface coating available upon request | |
| | Light Transmission | 88% ± 2% | |
| | Controller | USB interface | |

**ADVANTECH**    **Interactive Self-service Terminals**

# Specifications (Cont.)

| | | |
|---|---|---|
| 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 | ✓* |
| *Dependant on device model | Peripherals Watchlist | ✓* |

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

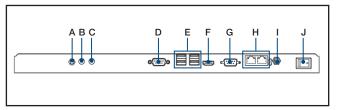| Part Number | Description |
|---|---|
| UTC-520G-PE | 21.5" 9H PCT.T/S with Intel® Pentium® N4200, 4GB RAM, IT Adapter |
| UTC-520GP-ATB0E | 21.5" 7H PCT.T/S with Intel® Pentium® N4200, 4GB RAM, IT Adapter |
| UTC-520GR-ATB0E | 21.5" Resi. T/S with Intel® Pentium® N4200, 4GB RAM, IT Adapter |
| UTC-520H-PE | 21.5" 9H PCT.T/S with Intel® Core™ i5 8365U, 4GB RAM, IT Adapter |
| UTC-520HP-ATB0E | 21.5" 7H PCT.T/S with Intel® Core™ i5 8365U, 4GB RAM, IT Adapter |
| UTC-520HR-ATB0E | 21.5" Resi. T/S with Intel® Core™ i5 8365U, 4GB RAM, IT Adapter |
| 1702002600 | Power cable, UL/CSA, 3P, 10A, 125V, 183 cm (USA) |
| 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-P02-A0E | Magnet strip reader (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) |
| UTC-P09-A0E | Fingerprint reader (via USB) |
| UTC-P21-A2E | 4-in-1 barcode + RFID + MSR + card reader module |

## Optional Accessories

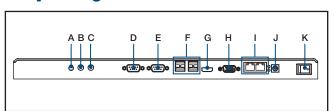| Part No. | Description |
|---|---|
| 96PD-00824 | UTK-700 Desktop Stand (w/o Printer) |
| 96PD-00825 | UTK-700 Extension Tower (For 96PD-00824 only) |
| UTC-520-STAND1E | Desktop stand for UTC-515/520 |
| ASK-TBSD-BS1702A01 | Desk Stand for 100 X 100 / 75 X 75 mm |
| UTC-T01-STANDE | Triangle shape floor stand |
| UTC-H01-STANDE | H-shaped floor stand |
| ASK-MNT-NMBLA37G00 | Wall Mount kit for UTC-515/520 |
| ASK-MNT-NMBLA10AC0 | Wall Mount kit for UTC-515/520 |

# Fully- Integrated I/O (UTC-520H)



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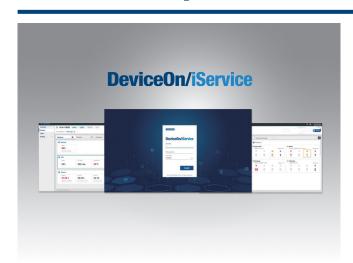E. 4 x USB 3.1
F. HDMI
G. COM1
H. 2 x LAN
I. DC-in
J. Power switch

# Fully- Integrated I/O (UTC-520G)



A. Antenna Port
B. Line-out
C. Mic-in
D. COM2
E. COM1
F. USB 3.0 x 2, USB 2.0 x 2
G. HDMI
H. VGA
I. LAN Ports x 2
J. DC Input
K. Power switch

# DeviceOn/iService

## Unified Remote Device Management Software



DeviceOn/iService

## 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



| Client Devices | | | DeviceOn Server | | Browser | |
|---|---|---|---|---|---|---|
| LAN | | | | Internet | | |
| android Hardware | Software | Peripherals | Cloud | On-site installation | Monitor status | Controls |
| **Free Installation** Via the Advantech website | | | **Download Installer** Via the Advantech website | | **Free Installation** Via browser | |

### Required Hardware

Windows10    8GB RAM    Intel® Core™ i5 storage    125GB

**Online Download**   www.advantech.com/products