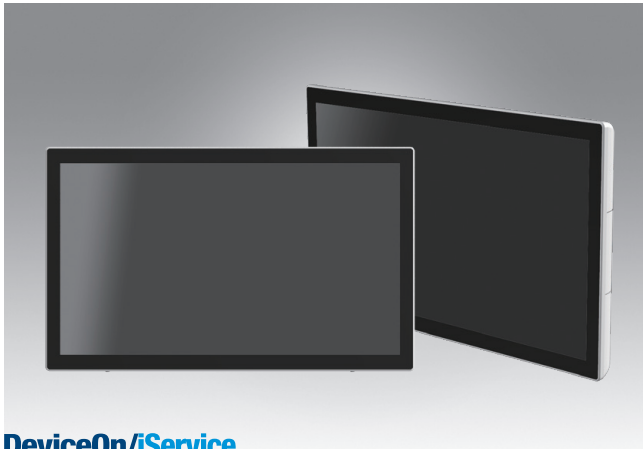


# UTC-320

**21.5" Ubiquitous Touch Computer**  
**UTC-320D with Intel® Celeron® J1900**  
**UTC-320F with Intel® Core™ i5-6300U**  
**UTC-320G with Intel® Pentium® N4200E**  
**UTC-320H with Intel® Core™ i5-8365UE**



DeviceOn/iService

## Features

- Low power and fanless system design
- Built in Intel Celeron® J1900 (UTC-320D), Core™ i5-6300U (UTC-320F) and, Pentium® N4200E (UTC-320G) and Intel® Core™ i5-8365UE (UTC-320H)
- 21.5" monitor with 16:9 widescreen display
- IP65-rated front panel for water and dust resistance
- Supports both landscape and portrait screen orientations
- VESA 100 mm standard mounting holes for varied mounting demands
- Detachable frame design for panel mount applications
- Support DeviceOn/iService software for remote device management (UTC-320D/F only)
- Support TPM 2.0 (UTC-320F&H)



## Introduction

UTC-320 is the multi-purpose all-in-one computing system which 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. With the removable frame, the system also could fulfill industries or control system applications with panel mounting design. UTC series touch panel computers are the best investments to enhance user satisfaction, further brand equity, and maximize business profits.

Moreover, UTC-320 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.

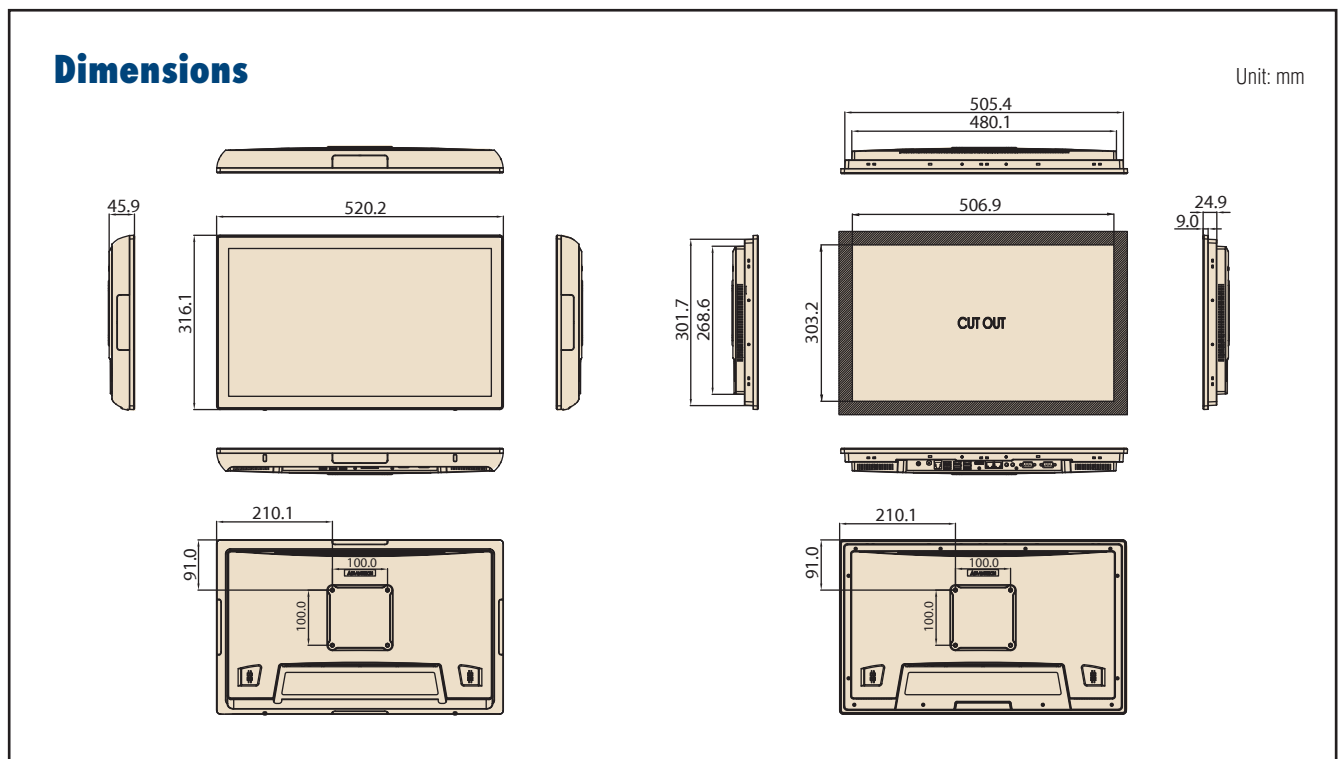
## Specifications

| Model                        | UTC-320D   | UTC-320F  | UTC-320G   | UTC-320H  |   |
|------------------------------|--|---|--|---|---|
| Processor System             | CPU  | Intel® Celeron® J1900   | Intel® Core™ i5-6300U (Default)<br>Intel® Core™ i3-6100U (Available)   | Intel® Pentium® N4200E (Default)<br>Intel® Celeron® N3350 (Available)   | Intel® Core™ i5-8365UE (Default)<br>Intel® Core™ i3-8145UE (Available)  |
|                              | Basic Frequency  | 2.0 GHz (Quad-Core)   | 2.4GHz (Duo Core)  | 1.10 GHz (Quad-Core)  | 1.6GHz(Quad-Core)   |
|                              | Cache  | L2 Cache MB   |  | L2 Cache 2MB  | L3 Cache 3MB  |
|                              | Memory   | 1 x 204pin SO-DIMM DDR3L<br>1333 MHz up to 8 GB   | 1 x 260pin SO-DIMM DDR4<br>2133 MHz<br>up to 16 GB   | 1 x 204pin SO-DIMM DDR3L<br>1866 MHz<br>up to 8GB   | 1X 260pin SO-DIMM DDR4<br>2400 MHz up to 32GB   |
|                              | HDD  | 1 x 2.5 internal SATA HDD bay   |  |   |   |
|                              | Network  | 2 x Gigabit Ethernet ports (RJ-45)  |  |   |   |
|                              | I/O ports  | 1 x RS-232<br>1 x RS-232 / 422 / 485<br>5 x USB 2.0 / 1 x USB 3.0<br>2 x Gigabit Ethernet (RJ-45)<br>1 x HDMI<br>Audio Line-out x 1, Mic-in x 1                   | 1 x RS-232<br>1 x RS-232/422/485<br>2 x USB 2.0 / 4 x USB 3.0<br>2 x Gigabit Ethernet (RJ-45)<br>1 x HDMI<br>1 x RJ-11<br>Audio Line-out x 1, Mic-in x 1 | 1 x RS-232<br>1 x RS232 / 422 /485<br>2 x USB 2.0 / 4 x USB 3.0<br>2 x Gigabit Ethernet (RJ-45)<br>1 x HDMI<br>1 x RJ11<br>Audio Line-out x 1, Mic-in x 1 | 1 x RS-232<br>1 x RS-232/485<br>6 x USB 3.1<br>2 x Gigabit Ethernet (RJ-45)<br>1 x HDMI<br>1 x DP<br>Audio Line-out x 1, Mic-in x 1 |
|                              | Stereo Speaker   | 2Wx2  |  |   |   |
|                              | BUS expansion  | Full-size MiniPCIe/mSATA  |  | M.2 2230/mSATA  | M.2 2280 (NVMe) or M.2 2242 / M.2 2230  |
|                              | Mounting   | VESA 100 x 100; Screw Size: M4, 10mm  |  |   |   |
| Dimension (W x H x D)        | 520.2 x 316.1 x 45.9 mm  |   |  |   |   |
| Weight                       | 6.5 Kg   |   |  |   |   |
| Security                     | TPM2.0   | Support   | Optional   | Support   |   |
| OS support                   | WES 7P 32bit<br>WES 7E 32bit<br>Windows Pro Embedded 7 SP1 64bit<br>WES8 64bit<br>Windows Embedded 8.1 Industry Pro 64bit<br>Win 10 IoT Enterprise 64bit<br>Linux<br>Android 6.0 | WES 7P 32bit<br>WES 7E 32bit<br>Windows Pro Embedded 7 SP1 64bit<br>WES8 64bit<br>Windows Embedded 8.1 Industry Pro 64bit<br>Win 10 IoT Enterprise 64bit<br>Linux | Win 10 IoT Enterprise 64bit<br>Android 10.0<br>Linux   | Win 10 IoT Enterprise 64bit<br>Linux  |   |
| Environmental Specifications | Operating Temperature  | 0 ~ 40° C (32 ~ 104° F)   |  |   |   |
|                              | Relative Humidity  | 10 ~ 95% @ 40° C non-condensing   |  |   |   |
|                              | Vibration  | 0.5G  |  |   |   |
|                              | Shock  | 10 G peak acceleration (11 msec. duration)  |  |   |   |
|                              | EMC/ Safety  | CE, FCC, UL, CCC CB,BSMI  |  |   |   |
| Front Panel Protection       | IP65/ NEMA4 Compliant  |   |  |   |   |
| Power Supply                 | Input Voltage  | 12V <sub>dc</sub> *12-30V <sub>dc</sub> Optional  | 12-30V <sub>dc</sub>   | 12V <sub>dc</sub> *12-30V <sub>dc</sub> Optional  |   |
|                              | Power Consumption  | Typical 45W, Max. 80W   |  |   |   |
|                              | Adapter  | 12V = 7A, 84W or 12V = 8A, 96W ITE adapter (dependent on stock)   |  |   |   |
| LCD Display                  | Size   | 21.5" TFT LCD   |  |   |   |
|                              | Max Resolution   | 1920 x 1080   |  |   |   |
|                              | Max Color  | 16.7M   |  |   |   |
|                              | Pixel Pitch (um)   | 248.25 (H) x 248.25 (V)   |  |   |   |
|                              | Brightness (cd/m <sup>2</sup> )  | 250 (Typical)   |  |   |   |
|                              | View Angle   | 178°/178°   |  |   |   |
| Touch Screen                 | Type   | Analog Resistive 5-wires (Res. Flat Glass) / Projected Capacitive Touch Panel (Pcap. Flat Glass) / Glass Panel  |  |   |   |
|                              | Light Transmission   | 90% ± 2% / 80% ± 5% / 90%   |  |   |   |
|                              | Controller   | COM interface / USB interface   |  |   |   |

## Specifications (Cont.)

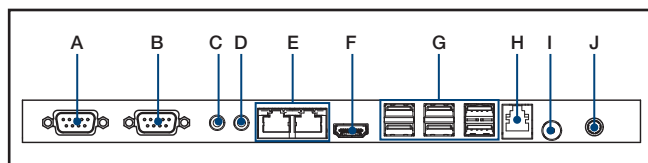
|   |                                    |            |
|---|------------------------------------|------------|
| DeviceOn/iService<br>Remote Device Management | Operating System                   | Windows 10 |
|   | Common Controls (Reboot, Shutdown) | ✓          |
|   | Remote desktop                     | ✓ (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>



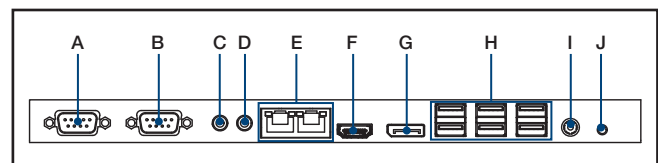
## Fully- Integrated I/O

### UTC-320D/F/G



- A. COM1
- B. COM2
- C. Line-out (UTC-320D)
- D. Mic-in (UTC-320F/UTC-320G)
- E. Line-Out (UTC-320F/UTC-320G)
- F. HDMI
- G. USB 2.0 x 5 / USB 3.0 x 1 (UTC-320D)  
USB 2.0 x 2 / USB 3.0 x 4 (UTC-320F/  
UTC-320G)
- H. RJ-11 (UTC-320F/UTC-320G)
- I. Power button
- J. DC input 12V (UTC-320D/UTC-320G)  
12-30V (UTC-320F)

### UTC-320H



- A. COM1
- B. COM2
- C. Mic in
- D. Line-out
- E. LAN ports x 2
- F. Power button
- G. HDMI
- H. DP
- I. USB 3.1 x 6
- J. DC input 12-30V

## Ordering Information

| Part No.        | US only P/N     | Description  |
|-----------------|-----------------|--|
| UTC-320DR-ATW0E | UTC-320DR-USW0E | 21.5" White, Intel® Celeron® J1900, Res T/S, 4GB RAM, IT Adapter   |
| UTC-320DR-ATB0E | UTC-320DR-USB0E | 21.5" Black, Intel® Celeron® J1900, Res T/S, 4GB RAM, IT Adapter   |
| UTC-320DP-ATW0E | UTC-320DP-USW0E | 21.5" White, Intel® Celeron® J1900, PCap T/S, 4GB RAM, IT Adapter  |
| UTC-320DP-ATB0E | UTC-320DP-USB0E | 21.5" Black, Intel® Celeron® J1900, PCap T/S, 4GB RAM, IT Adapter  |
| UTC-320FR-ATW0E | UTC-320FR-USW0E | 21.5" White, Intel® Core™ i5-6300U, Res T/S 4GB RAM, IT Adapter    |
| UTC-320FR-ATB0E | UTC-320FR-USB0E | 21.5" Black, Intel® Core™ i5-6300U, Res T/S 4GB RAM, IT Adapter    |
| UTC-320FP-ATW0E | UTC-320FP-USW0E | 21.5" White, Intel® Core™ i5-6300U, PCap T/S 4GB RAM, IT Adapter   |
| UTC-320FP-ATB0E | UTC-320FP-USB0E | 21.5" Black, Intel® Core™ i5-6300U, PCap T/S 4GB RAM, IT Adapter   |
| UTC-320GR-ATW0E | UTC-320GR-USW0E | 21.5" White, Intel® Pentium® N4200E, Res T/S, 4GB RAM, IT Adapter  |
| UTC-320GR-ATB0E | UTC-320GR-USB0E | 21.5" Black, Intel® Pentium® N4200E, Res T/S, 4GB RAM, IT Adapter  |
| UTC-320GP-ATW0E | UTC-320GP-USW0E | 21.5" White, Intel® Pentium® N4200E, PCap T/S, 4GB RAM, IT Adapter |
| UTC-320GP-ATB0E | UTC-320GP-USB0E | 21.5" Black, Intel® Pentium® N4200E, PCap T/S, 4GB RAM, IT Adapter |
| UTC-320HR-ATW0E | UTC-320HR-USW0E | 21.5" White, Intel® Core™ i5-8365UE, Res T/S, 8GB RAM, IT Adapter  |
| UTC-320HR-ATB0E | UTC-320HR-USB0E | 21.5" Black, Intel® Core™ i5-8365UE, Res T/S, 8GB RAM, IT Adapter  |
| UTC-320HP-ATW0E | UTC-320HP-USW0E | 21.5" White, Intel® Core™ i5-8365UE, PCap T/S, 8GB RAM, IT Adapter |
| UTC-320HP-ATB0E | UTC-320HP-USB0E | 21.5" Black, Intel® Core™ i5-8365UE, PCap T/S, 8GB RAM, IT Adapter |

\*White Touch Bezel could be customized by customer request with MOQ

### UTC-320 WiFi Ordering Information

| Part No.      | US only P/N   | Description  |
|---------------|---------------|--|
| UTC-300P-W10E | UTC-300P-W10U | WiFi Kit for UTC-320D/E/F (MiniPCle, WiFi only)          |
| UTC-300P-W11E | UTC-300P-W11U | WiFi Kit for UTC-320D/E/F (MiniPCle, WiFi and Bluetooth) |
| UTC-300P-W12E | UTC-300P-W12U | WiFi Kit for UTC-320G/H (M.2 2230, WiFi and Bluetooth)   |

### Installation Accessory

| Part No.          | US only P/N       | Description   |
|-------------------|-------------------|---|
| UTC-300P-D20E     | UTC-300P-D20U     | Desk Stand, Single Color-Silver (UTC-318/UTC-320 series)    |
| UTC-T01-STANDE    | Not applicable    | Triangle shape floor stand (UTC-315/UTC-318/UTC-320 series) |
| UTC-H01-STANDE    | Not applicable    | H-shaped floor stand (UTC-315/UTC-318/UTC-320 series)       |
| UTC-PANEL-MOUNT4E | UTC-PANEL-MOUNT4U | Panel mount Kit(UTC-320Series)                              |
| UTC-WALL-MOUNT1E  | Not Applicable    | Wall Mount Kit for UTC-315/318/320 (Swivel)                 |
| UTC-WALL-MOUNT3E  | Not applicable    | Wall Mount Kit for UTC-315/318/320 (Fixed)                  |

### Peripherals for UTC-300 series

| Part No.       | US only P/N    | Description                                    |
|----------------|----------------|--|
| UTC-300P-C20E  | UTC-300P-C20U  | 5M Camera Module, White, for UTC-300 series    |
| UTC-300P-C21E  | UTC-300P-C21U  | 5M Camera Module, Black, for UTC-300 series    |
| UTC-300P-M20E  | UTC-300P-M20U  | Magnet Strip Reader, White, for UTC-300 series |
| UTC-300P-M21E  | UTC-300P-M21U  | Magnet Strip Reader, Black, for UTC-300 series |
| UTC-300P-R20E  | UTC-300P-R20U  | RFID Reader, White, for UTC-300 series         |
| UTC-300P-R21E  | UTC-300P-R21U  | RFID Reader, Black, for UTC-300 series         |
| UTC-300P-S20E  | UTC-300P-S20U  | Smart Card Reader, White, for UTC-300 series   |
| UTC-300P-S21E  | UTC-300P-S21U  | Smart Card Reader, Black, for UTC-300 series   |
| UTC-300P-B60E  | UTC-300P-B60U  | 2D Barcode Reader, White for UTC-300 series    |
| UTC-300P-B61E  | UTC-300P-B61U  | 2D Barcode Reader, Black for UTC-300 series    |
| UTC-300P-FP11E | UTC-300P-FP11U | Fingerprint Reader (black) for UTC-300 series  |

### Power Cord Ordering Information

| Part NO.     | Description                                   |
|--------------|---|
| 1702002605   | Power cord 2P FRANCE 10A/16A 220V 1.83M 90D   |
| 1702002600   | Power Cord 3P UL/CSA(USA) 125V 10A 1.83M 180D |
| 170000596-11 | Power Cord (China) CCC, 10A 250V, 3P 1830mm   |
| 1700018704   | Power Cord UK BSI 2P 10A 250V 180cm 18AWG     |
| 1700000237   | Power Cord PSE 3P 12A 125V 183cm              |
| 1700001714   | Power Cord BSMI 3P 7A 125V 183cm              |

# 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

