

# UTC-510

**10.1" Ubiquitous Touch Computer**  
**UTC-510D with Intel® Celeron® J1900**  
**UTC-510G with Intel® Pentium® N4200**  
**UTC-510J with Intel® Celeron® J6412**



## Features

- Low Power & Fanless design
- Built-in Intel® Celeron® J1900 (UTC-510D)
- Built in Intel® Pentium® N4200 (UTC-510G)
- Built-in Intel® Celeron® J6412 (UTC-510J)
- Providing Natural Viewing Experience with 16:10 10.1" Display
- Landscape & Portrait screen mode support by different applications
- VESA 75 mm standard mounting holes for varied mounting demands
- Detachable plastic frame design for panel mount applications
- Support DeviceOn/iService software for remote device management



## Introduction

UTC-510 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.

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

Processor System	CPU	Intel® Celeron® J1900 (UTC-510D)	Intel® Pentium® N4200 (UTC-510G)	Intel® Celeron® J6412 (UTC-510J)
	Base Frequency	2 GHz (Quad-Core)	1.10 GHz (Quad-Core)	2.0GHz
	Cache	L2 Cache 2MB	L2 Cache 2MB	1.5 MB L2 Cache
	Memory	1 x 204 pin SO-DIMM DDR3L 1333 MHz up to 8 GB	1 x 204 pin SO-DIMM DDR3L 1866MHz up to 8 GB	1 x DDR4 3200MHz up to 32G
	HDD	1 x 2.5 internal SATA HDD bay		N/A
	Network (LAN)	1 x Gigabit Ethernet ports (Supports Wake on LAN)		2 x Gigabit Ethernet ports
	I/O ports	2 x RS-232 COM (COM1 RS-422/485 supported)* 1 x USB 2.0 / 1 x USB 3.0 / 2 x USB 2.0 (optional)* 1 x Gigabit Ethernet (RJ-45) 1 x VGA Audio Line-out x 1, Mic-in x 1	2 x RS-232 COM (COM1 RS-422/485 supported)* 2 x USB 3.0 / 2 x USB 2.0 (optional)* 1 x Gigabit Ethernet (RJ-45) 1 x VGA Audio Line-out x 1, Mic-in x 1	4 x USB3.2 Gen2 (10Gbps) 2 x GbE (RJ-45) 1 x HDMI 2 x RS-232 COM (RS-422/485)* 1 x Audio Line-out 1 x Mic-in
	Stereo Speaker	2 W x 1		2 W x 2
	Bus expansion	1 Half size MiniPCle 1 Half size mSATA	1 Full size MiniPCle 1 Half size mSATA	1x E-Key for wireless module (Type: 2230) 1x M-Key support SATA M.2 2242 module
	Mounting	VESA 75 x 75 mm		
OS Support	Dimensions (W x H x D)	265.40 x 182.40 x 39.55 mm		
	Weight	1.80 kg (3.97 lbs)		
Front Panel Protection	OS Support	WE8S 32bit Windows Embedded 8.1 Industry Pro 64bit Win 10 IoT Enterprise 64bit Linux Ubuntu 18.04 Android 6.0	Window 10 IoT Enterprise Linux Ubuntu 20.04 Android 12	Win 10 IoT Enterprise, Win 11 IoT Enterprise Android 14 Ubuntu 22.04
	IP 65 Compliant			
Environmental Specifications	Operating Temperature	0 ~ 35° C (32 ~ 95° F)	0 ~ 45° C (32 ~ 113° F)	0 ~ 40° C (32 ~ 104° F)
	Relative Humidity	95% @ 40° C non-condensing		
	Vibration	1Grms		
	Shock	10G peak acceleration (11 msec. duration)		
	Certification	CE (No RED certification), FCC, CB, UL, CCC, BSMI		
Power Supply	Input Rating	12 V/3 A (36W ITE Adapter)		
	Power consumption	Typical 10W Max. 20W		Typical 25W Max. 35W

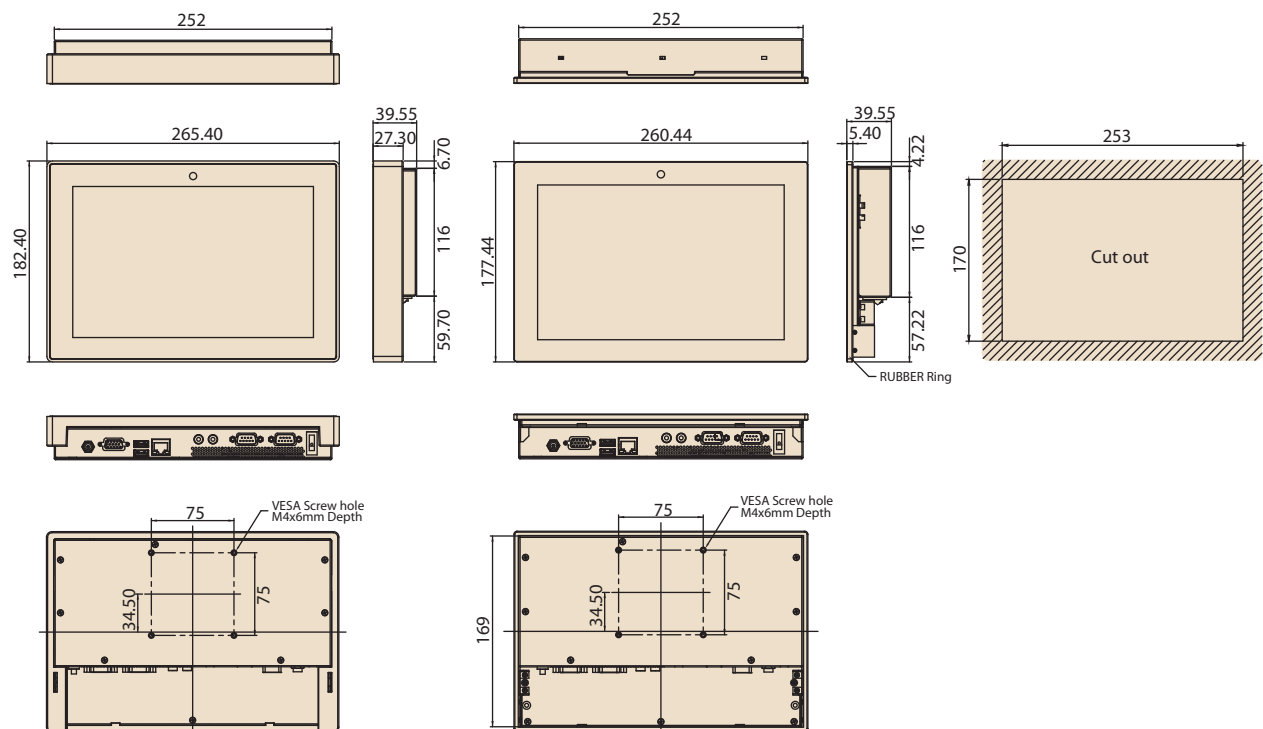
## Specifications (Cont.)

LCD Display	Size/Type	10.1" TFT LCD with LED backlight
	Max. Resolution	1280 x 800
	Max. Color	16.7M
	Pixel Pitch (um)	169.5 x 169.5
	Brightness (cd/m <sup>2</sup> )	350
	View Angle	170 / 170
	Camera	5 Mega Pixel (Optional)
Touch Screen Option (PE/GE)	Type	Projected Capacitive. Glass Panel
	Light Transmission	80% ± 5% / 90%
	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&sst=Utility>

## Dimensions

Unit: mm



## Ordering Information

Part No.	Description
UTC-510DP-ATB1E	10.1" Intel Celeron J1900 Based fanless UTC with PCT.T/S 4GB RAM
UTC-510GP-ATB1E	10.1" Intel Pentium N4200 Based fanless UTC with PCT.T/S 4GB RAM
UTC-510GP-ATN1E	10.1" Intel Pentium N4200 Based fanless UTC with PCT.T/S 4GB RAM, Ant
UTC-510JP-ATB0E	10.1" Intel Celeron J6412 Based fanless UTC with PCT.T/S 4GB RAM
1700001524	Power Cord 3P UL 10A 125V 180cm
170203180A	Power Cord 3P UK 2.5A/3A 250V 1.83M
170203183C	Power Cord 3P Europe (WS-010+WS-083)183cm
1700021374-01	Power Cord 3P CCC 2.5A 250V 250cm (IEC60320-C5)
1960073820N102	IO Cover UTC-510D/G
1960117660N001	IO Cover UTC-510J/K
1931031500	Screws for IO Cover UTC-510(*2)

### Peripherals for UTC-510 series

Part No.	Description
UTC-510P-B03E	2D Barcode Scanner - Honeywell N4680 For UTC-510 (USB connection)
UTC-510P-F01E	Finger Print Reader For UTC-510 (USB connection)
UTC-510P-R01E	RFID Reader For UTC-510 (USB connection)
UTC-510P-M01E	Magnet Strip Reader For UTC-510 (USB connection)
UTC-510P-S01E	Smart Card Reader For UTC-510 (USB connection)

### Installation Accessory

Part No.	Description
UTC-WALL-MOUNT5E	UTC-510 VESA mount (75 x 75)
UTC-510-STAND0E	UTC-510 desktop stand
1960074091N000	UTC-510 Panel Mount Clamper (*4)
1930005598	UTC-510 Panel Mount Screw (*4)
ARES-2414X-S150201	Table Stand, 75x75mm

### WIFI ordering information for UTC-510 series

#### UTC-510D/G

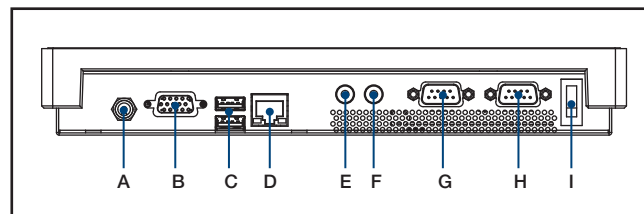
Part No.	Description
UTC-510PW-A0E	510(PoE), EWM-W172, 802.11ac/a/b/g/n, 2T2R,BT4.2HMC
UTC-510PW-A1E	510(PoE), EWM-W193, 802.11ac/a/b/g/n, 2T2R,BT5.0HMC
UTC-510PW-A2E	510(PoE), EWM-W189, 802.11ac/a/b/g/n, 2T2R,BT4.2HMC

#### UTC-510J/K

Part No.	Description
UTC-510W-A3E	AIW-163BR, 802.11a/b/g/n/ac/ax, 2T2R, BT5.2, M.2 2230
UTC-510W-A4E	EWM-W179, 802.11a/b/g/n/ac/ax, 2T2R, BT5.2, M.2

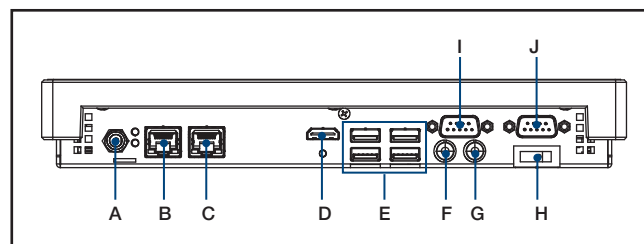
## Fully- Integrated I/O

### UTC-510D/G



- A. DC Power jack
- B. VGA
- C. USB 3.0 X 1, USB 2.0 x 1 (for UTC-510D)  
USB 3.0 X 2 (for UTC-510G)
- D. LAN Ports
- E. MIC-in
- F. Line-out
- G. COM 2
- H. COM 1
- I. Power switch

### UTC-510J



- A. DC Power Jack
- B. LAN 1
- C. LAN 2
- D. HDMI
- E. USB3.2 x 4
- F. Mic-in
- G. Line-out
- H. Power Switch
- I. COM 2
- J. COM 1

# DeviceOn/iService

## Unified Remote Device Management Software



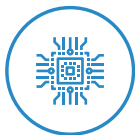
### Features

- 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

