UTC-318

18.5" Ubiquitous Touch Computer
UTC-318D with Intel® Celeron® J1900
UTC-318F with Intel® Core™ i5-6300U
UTC-318G with Intel® Pentium® N4200E
UTC-318H with Intel® Core™ i5-8365UE

DeviceOn/iService

Features

- Low power and fanless system design
- Built in Intel Celeron® J1900 (UTC-318D), Core™ i5-6300U (UTC-318F), Pentium® N4200E(UTC-318G) and Intel® Core™ i5-8365UE (UTC-318H)
- 18.5" 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-318D/F only)
- Support TPM 2.0 (UTC-318F&H)

Introduction

UTC-318 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-318 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-318D	UTC-318F	UTC-318G	UTC-318H
Processor System	CPU	Intel® Celeron® J1900	Intel® Core™ i5-6300U (Default) Intel® Core™ i3-6100U (Available)	Intel® Pentium® N4200E (Default) Intel® Celeron® N3350E (Available)	Intel® Core™ i5-8365UE (Default) 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	L3 Cache 3MB	L2 Cache 2MB	L3 Cache 3MB
	Memory	1 x 204pin SO-DIMM DDR3L 1333 MHz up to 8 GB	1 x 260pin SO-DIMM DDR4 2133 MHz up to 16 GB	1 x 204pin SO-DIMM DDR3L 1866 MHz up to 8GB	1 x 260pin SO-DIMM DDR4 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 1 x RS-232 / 422 / 485 5 x USB 2.0 / 1 x USB 3.0 2 x Gigabit Ethernet (RJ-45) 1 x HDMI Audio Line-out x 1, Mic-in x 1	1 x RS-232 1 x RS-232/422/485 2 x USB 2.0 / 4 x USB 3.0 2 x Gigabit Ethernet (RJ-45) 1 x HDMI 1 x RJ-11 Audio Line-out x 1, Mic-in x 1	1 x RS-232 1 x RS232 / 422 /485 2 x USB 2.0 / 4 x USB 3.0 2 x Gigabit Ethernet (RJ-45) 1 x HDMI 1 x RJ11 Audio Line-out x 1, Mic-in x 1	1 x RS-232 1 x RS-232/485 6 x USB 3.1 2 x Gigabit Ethernet (RJ-45) 1 x HDMI 1 x DP Audio Line-out x 1, Mic-in x 1
	Stereo Speaker	2W x 2			
	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(WxHxD)	475 x 295 x 43.5 mm			
	Weight	5 kg			
Security	TPM2.0		Support	Optional	Support
OS support		WES 7P 32bit WES 7E 32bit Windows Pro Embedded 7 SP1 64bit WE8S 64bit Windows Embedded 8.1 Industry Pro 64bit Win 10 IoT Enterprise 64bit Linux Android 6.0	WES 7P 32bit WES 7E 32bit Windows Pro Embedded 7 SP1 64bit WE8S 64bit Windows Embedded 8.1 Industry Pro 64bit Win 10 IoT Enterprise 64bit Linux	Win 10 IoT Enterprise 64bit Android 10.0 Linux	Win 10 IOT Enterprise 64bit 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	$12V_{DC}$ *12-$30V_{DC}$ Optional	12-$30V_{DC}$	$12V_{DC}$ *12-$30V_{DC}$ Optional	12-$30V_{DC}$
	Power Consumption	Typical 32W, Max. 70W			
	Adapter	12V ⎓ 7A, 84W or 12V ⎓ 8A, 96W ITE adapter (dependent on stock)			
LCD Display	Size	18.5" TFT LCD			
	Max Resolution	1366 x 768 (FHD 1920 x 1080 Optional)			
	Max Color	16.7M			
	Pixel Pitch (um)	300(H) x 300(V)			
	Brightness (cd/m²)	250(Typical)/ 350 (FHD Optional)			
	View Angle	170°/160°			
Touch Screen	Type	Analog Resistive 5-wires (Res. Flat Glass) / Projected Capacitive Touch Panel (Pcap. Flat Glass) / Glass Panel			
	Light Transmission	Res. Touch : 80% ± 5% / P-Cap Touch : 90% ± 2%			
	Controller	COM interface / USB interface			

All product specifications are subject to change without notice, * identify as optional function

Last updated: 24-Feb-2022

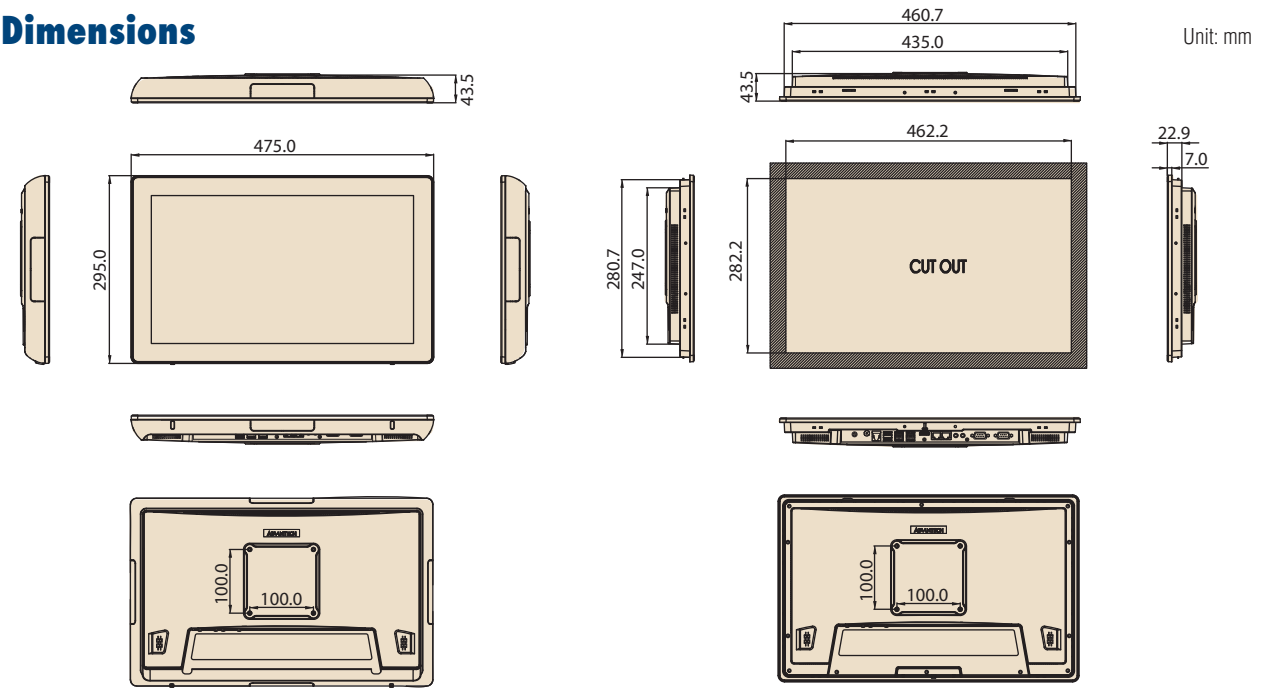
Specifications (Cont.)

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	✓
*Dependant on device model	Software Start/Stop	✓*

Note: DeviceOn/iService software must be downloaded from the Advantech website at https://www.advantech.com/search/?q=DeviceOn%2FiService&st=support&sst=Utility

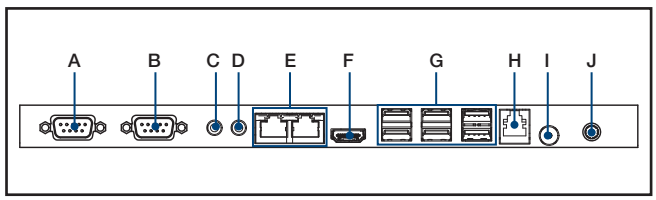
Dimensions

Unit: mm



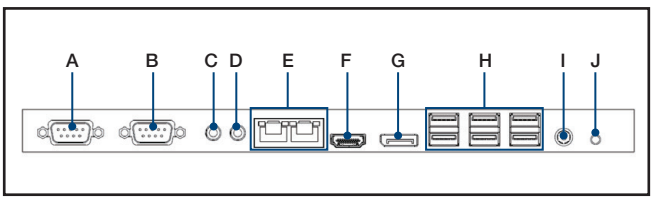
Fully-Integrated I/O

UTC-318D/F/G



A. COM1
B. COM2
C. Line-out (UTC-318D)
C. Mic-in (UTC-318F/UTC-318G)
D. Mic-in (UTC-318D)
D. Line-Out (UTC-318F/UTC-318G)
E. LAN ports x 2
F. HDMI
G. USB 2.0 x 5 / USB 3.0 x 1 (UTC-31D)
USB 2.0 x 2 / USB 3.0 x 4 (UTC-318F/UTC-318G)
H. RJ-11 (UTC-318F/UTC-318G)
I. Power button
J. DC input 12V (UTC-318D/UTC-318G)
12-30V (UTC-318F)

UTC-318H



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

Ordering Information

Part No.	US only P/N	Description
UTC-318DR-ATW0E	UTC-318DR-USW0E	18.5" White, Intel® Celeron® J1900, Res T/S, 4 GB RAM, IT Adapter
UTC-318DR-ATB0E	UTC-318DR-USB0E	18.5" Black, Intel® Celeron® J1900, Res T/S, 4 GB RAM, IT Adapter
UTC-318DP-ATW0E	UTC-318DP-USW0E	18.5" White, Intel® Celeron J1900, PCap T/S, 4 GB RAM, IT Adapter
UTC-318DP-ATB0E	UTC-318DP-USB0E	18.5" Black, Intel® Celeron® J1900, PCap T/S, 4 GB RAM, IT Adapter
UTC-318FR-ATW0E	UTC-318FR-USW0E	18.5" White, Intel® Core™ i5-6300U, Res T/S 4GB RAM, IT Adapter
UTC-318FR-ATB0E	UTC-318FR-USB0E	18.5" Black, Intel® Core™ i5-6300U, Res T/S 4GB RAM, IT Adapter
UTC-318FP-ATW0E	UTC-318FP-USW0E	18.5" White, Intel® Core™ i5-6300U, PCap T/S 4GB RAM, IT Adapter
UTC-318FP-ATB0E	UTC-318FP-USB0E	18.5" Black, Intel® Core™ i5-6300U, PCap T/S 4GB RAM, IT Adapter
UTC-318GR-ATW0E	UTC-318GR-USW0E	18.5" White, Intel® Pentium® N4200E, Res T/S, 4 GB RAM, IT Adapter
UTC-318GR-ATB0E	UTC-318GR-USB0E	18.5" Black, Intel® Pentium® N4200E, Res T/S, 4 GB RAM, IT Adapter
UTC-318GP-ATW0E	UTC-318GP-USW0E	18.5" White, Intel® Pentium® N4200E, PCap T/S, 4 GB RAM, IT Adapter
UTC-318GP-ATB0E	UTC-318GP-USB0E	18.5" Black, Intel® Pentium® N4200E, PCap T/S, 4 GB RAM, IT Adapter
UTC-318HR-ATW0E	UTC-318HR-USW0E	18.5" White, Intel® Core™ i5-8365UE, Res T/S, 8GB RAM, IT Adapter
UTC-318HR-ATB0E	UTC-318HR-USB0E	18.5" Black, Intel® Core™ i5-8365UE, Res T/S, 8GB RAM, IT Adapter
UTC-318HP-ATW0E	UTC-318HP-USW0E	18.5" White, Intel® Core™ i5-8365UE, PCap T/S, 8GB RAM, IT Adapter
UTC-318HP-ATB0E	UTC-318HP-USB0E	18.5" Black, Intel® Core™ i5-8365UE, PCap T/S, 8GB RAM, IT Adapter

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

UTC-318 WiFi Ordering Information

Part No.	US only P/N	Description
UTC-300P-W10E	UTC-300P-W10U	WiFi Kit for UTC-318D/F (MiniPCIe, WiFi only)
UTC-300P-W11E	UTC-300P-W11U	WiFi Kit for UTC-318D/F (MiniPCIe, WiFi and Bluetooth)
UTC-300P-W12E	UTC-300P-W12U	WiFi Kit for UTC-318G/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-MOUNT5E	UTC-PANEL-MOUNT5U	Panel Mount Kit (UTC-318 Series)
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
1700000596-11	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

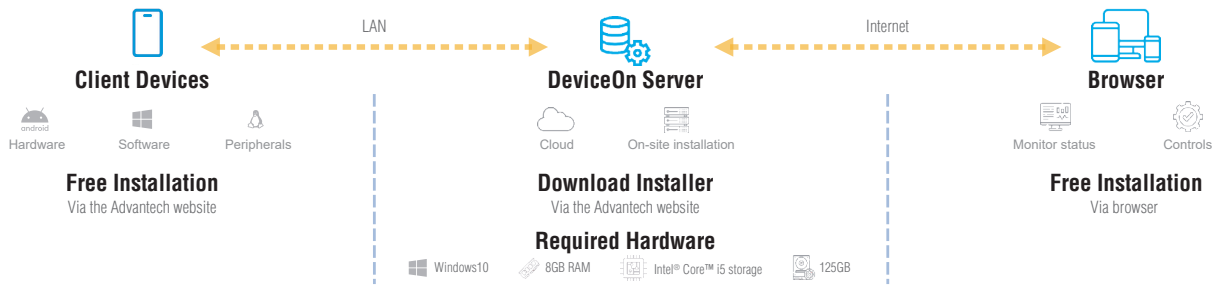
Troubleshooting
- Screenshots
- Remote desktop support

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