

UTC-520

21.5" Ubiquitous Touch Computer UTC-520D with Intel® Celeron J1900 UTC-520G with Intel® Pentium® N4200



DeviceOn/iService

Features

- Low power and fanless system design
- Build-in Intel® Celeron J1900 (UTC-520D default)
- Built-in Intel® Pentium N4200 (UTC-520G default)
- 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 flexible peripheral installation
- White RAL9016 available for UTC-520D
- Optional 400 nit LCD panel
- Support DeviceOn/iService software for remote device management



Introduction

UTC-520 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. 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 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-520D	UTC-520G	
Processor System	CPU	Intel® Celeron® J1900 (Default)	Intel® Pentium® N4200 (Default)
	Base Frequency	2 GHz (Quad-Core)	1.1 GHz (Quad-Core)
	Cache	L2 Cache 2MB	L2 Cache 2MB
	Memory	1 x SO-DIMM DDR3L 1333 MHz up to 8 GB	1 x 204 pin SO-DIMM 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 ports (Supports Wake on LAN)	2 x Gigabit Ethernet Ports, Intel I210AT (supports Wake on LAN)
	I/O ports	2 x RS-232 COM (RS-422/485)* 3 x USB 2.0 / 1 x USB 3.0 2 x Gigabit Ethernet (RJ-45) 1 x VGA & HDMI Audio Line-out x 1, Mic-in x 1	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	2 x 3W
	Bus expansion	Full-size MiniPCIe / mSATA	1 x Full-size MiniPCIe / mSATA 1 x M.2 E-key 2230
	Mounting	VESA 100 x 100 mm	VESA 100 x 100 mm
Dimensions (W x H x D)	517.64 x 313.51 x 43.50 (mm)	517.6 x 313.5 x 43.5 mm	
Weight	8 kg (17.6 lb)	8 kg (17.6 lb)	
OS Support		Win 10 IoT Enterprise Android 6.0 Linux Ubuntu 14.04	Win 10 IoT Enterprise Android 10 Linux Ubuntu 20.04
	Operating Temperature	0 ~ 40° C (32 ~ 104° F)	0 ~ 40° C (32 ~ 104° F)
	Relative Humidity	10 ~ 95% @ 40° C non-condensing	10 ~ 95% @ 40° C non-condensing
Environmental Specifications	Vibration	Operating 10G peak acceleration (11ms duration), follow IEC 60068-2-27	Operating 10G peak acceleration (11ms duration), follow IEC 60068-2-27
	Shock	Operating Random Vibration Test 5 ~ 500Hz, 1Grms @ with HDD; 2Grms @with SSD, follow IEC 60069-2-64	Operating Random Vibration Test 5 ~ 500Hz, 1Grms @with HDD; 2Grms @with SSD, follow IEC 60069-2-64
	EMC/ Safety	CE (No RED certification) (EN 61000-6-2: 2005 / AC: 2005), FCC, CB, UL, CCC, BSMI	CE (RED Compliance), EN 61000-6-2: 2005 /AC: 2005, FCC, UL, CB, CCC, BSMI
	Front Panel Protection	IP65/ NEMA4 Compliant	IP65/ NEMA4 Compliant
Power Supply	Input Voltage	12 V _{DC}	12V _{DC}
	Adapter	12 V/7 A (84 W ITE Adapter)	12V/7A (84W ITE Adapter)
	Power consumption	Typical 45W Max. 65W	Typical 35W Max 40W

Specifications (Cont.)

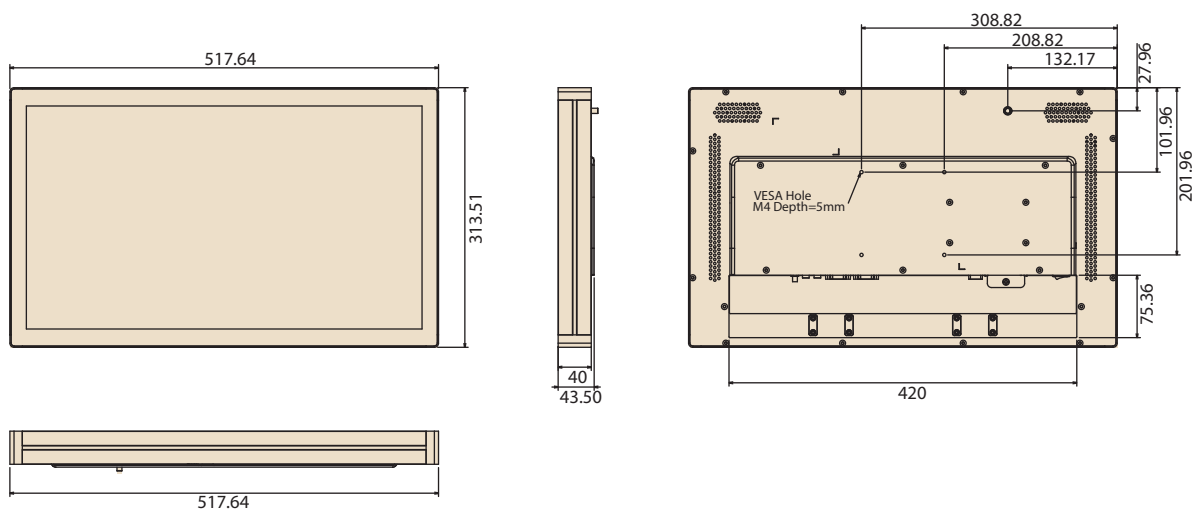
LCD Display	Size/Type	21.5" TFT LCD with LED backlight	21.5" TFT LCD with LED backlight
	Max.Resolution	1920 x 1080	1920 x 1080
	Max. Color	16.7M	16.7M
	Pixel Pitch (um)	248.25 (H) x 248.25 (V)	248.25 x 248.25
	Brightness (cd/m ²)	250 (Optional 400)	250 nits (400 nits optional)
	View Angle	178°/178°	178°/178°
Touch Screen Option (PE/RE/GE)	Type	Projected capacitive, Single point Analog Resistive 5-wires touch	Projected capacitive, Single point Analog Resistive 5-wires touch
	Light Transmission	90% ± 2% / 80% ± 5% / 90%	88% ± 2%, 80% ± 3%
	Controller	USB Interface / USB Interface / -	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-520D-PE	21.5" 9H PCT.T/S with Intel® Bay trail J1900, 4GB RAM, IT Adapter
UTC-520DP-ATB0E	21.5" 7H PCT.T/S with Intel® Bay trail J1900, 4GB RAM, IT Adapter
UTC-520D-RE	21.5" Resi. T/S with Intel® Bay trail J1900, 4GB RAM, IT Adapter
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

Peripherals for UTC-500 series

Part No.	Description
UTC-P01-A1E	5M Camera Module For UTC-5XX (USB connection)
UTC-P02-A0E	Magnet Strip Reader For UTC-5XX (USB connection)
UTC-P03-A0E	RFID Reader For UTC-5XX (USB connection)
UTC-P06-A0E	Smart Card Reader For UTC-5XX (USB connection)
UTC-P07-A4E	2D Barcode Module (Honeywell) for UTC-500 Series (USB connection)
UTC-P09-A0E	Fingerprint reader for UTC-5xx (USB connection)
UTC-P21-A3E	2D Barcode reader + RFID + SCR

Installation Accessory

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-520D WiFi Ordering Information

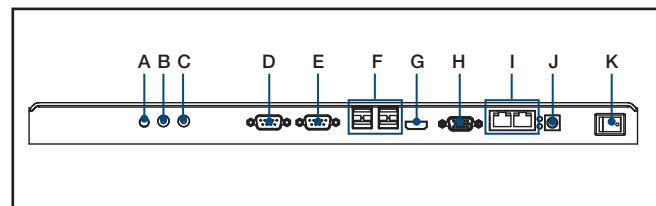
Part No.	Description
UTC-WIFI-A1E	EWM-W168H01E, 802.11ac/a/b/g/n, 2T2R, BT4.2, HMC
UTC-WIFI-A0E	EWM-W135H01E, 802.11 a/b/g/n, AR9382, 2T2R, HMC
UTC-WIFI-A2E	EWM-W189H02E, 802.11ac/a/b/g/n, 2T2R, BT4.2, HMC
UTC-WIFI-A3E	EWM-W193H01E, 802.11ac/a/b/g/n, 2T2R, BT5.0, HMC

UTC-520G WiFi Ordering Information

Part No.	Description
UTC-WIFI-A4E	EWM-W163M201E 802.11ac/a/b/g/n 2T2R WIFI with BT 4.1 QCA6174A, M.2 2230
UTC-WIFI-A5E	AIW-163BR 802.11ax with BT5.2, PCIe-USB, Realtek 8852BE, M.2 2230

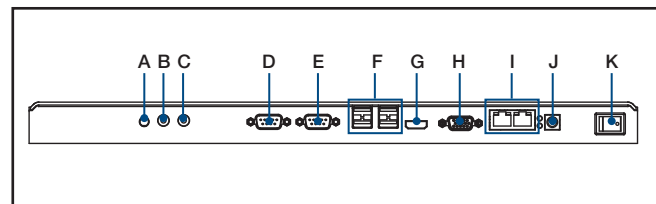
Fully- Integrated I/O

UTC-520D



- A. Antenna Port
- B. Line-out
- C. Mic-in
- D. COM2
- E. COM1
- F. USB 3.0 x1, USB 2.0 x3
- G. HDMI
- H. VGA
- I. LAN Ports x2
- J. DC Input
- K. Power switch

UTC-520G



- A. Antenna Port
- B. Line-out
- C. Mic-in
- D. COM2
- E. COM1
- F. USB 3.0 x2, USB 2.0 x2
- G. HDMI
- H. VGA
- I. LAN Ports x2
- J. DC Input
- K. 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

