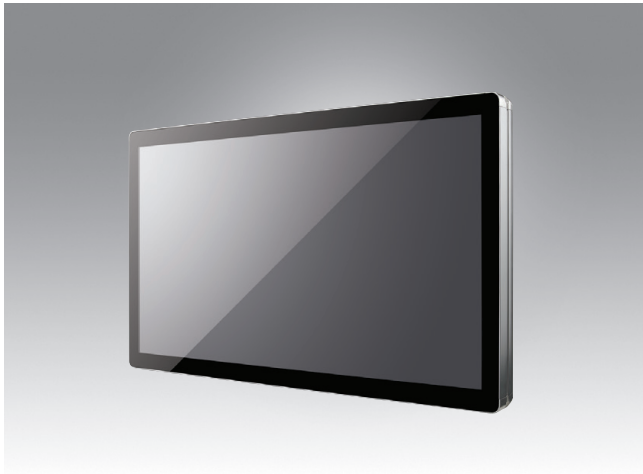# UTC-520 (IP66/69K)

21.5" Ubiquitous Touch Computer (IP66/69K)
UTC-520GT-ATB0E with Intel® Pentium® N4200
UTC-520FT-ATB0E with Intel® Skylake Core™ i5-6300U
UTC-520IT-ATB0E with Intel® Core™ i5-1145G7E
UTC-520JT-ATB0E with Intel® Celeron® J6412

Features

- Low power and fanless system design
- Wide operating temperature range (-10 ~ 50 °C)
- Build in 64G MLC SSD
- 21.5" monitor with 16:9 widescreen display
- IP66/69K rated for full system
- M12 for all I/O ports
- Supports both landscape and portrait screen orientations
- Anit-corrosion enclosure stainless chassis
- Quickly swappable storage slot (optional)
- Waterproof Wifi Solution (optional)
- Build in camera / LED indicter / Light sensor(optional)

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

Introduction

UTC-520 tough series 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.
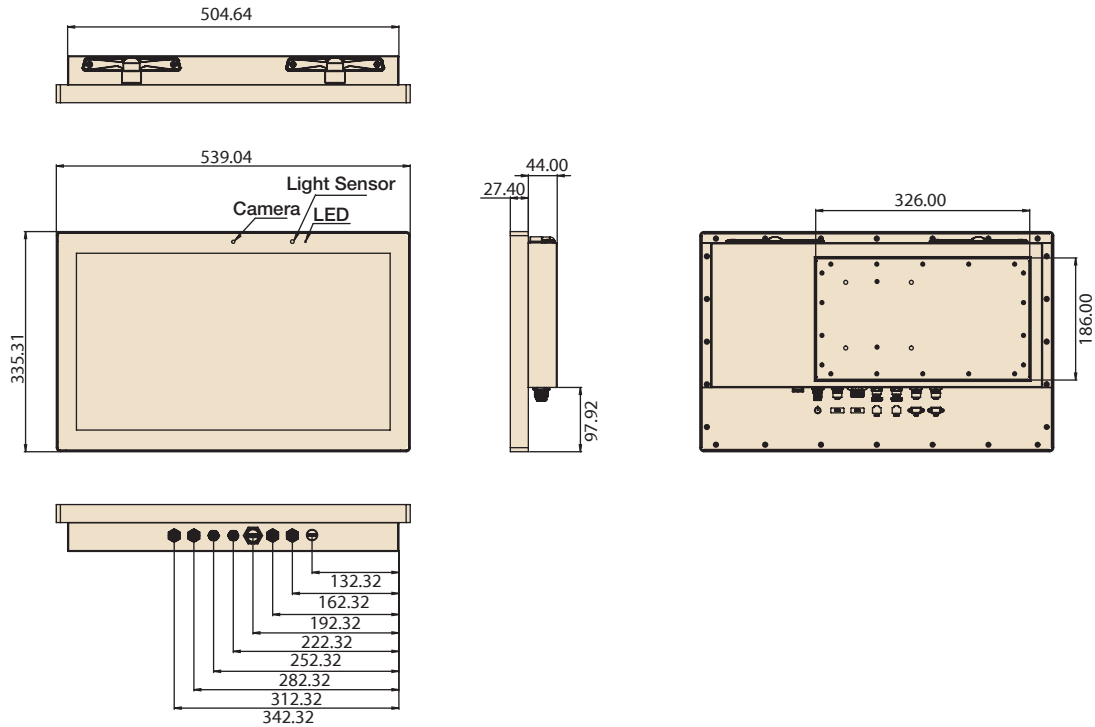
Specifications

Model		UTC-520GT-ATB0E	UTC-520FT-ATB0E	UTC-520IT-ATB0E	UTC-520JT-ATB0E
Processor System	CPU	Intel® Pentium® N4200	Intel® Skylake Core™ i5-6300U	Intel® Core™ i5-1145G7E	Intel® Celeron® J6412
	Base Frequency	1.1 GHz (N4200/Quad-Core) 1.6 GHz (E3950/Quad-Core)	2.4GHz (Dual-Core)	1.50/ 2.6 GHz/ Quad Core	2.0GHz
	Cache	L2 Cache 2MB	L3 Cache 3MB	L3 Cache 6MB	1.5 MB L2 Cache
	Memory	1 x 204 pin SO-DIMM DDR3L 1867 MHz up to 8GB	2 x 204 pin SO DIMM DDR3L 1600MHz up to 16 GB	2 x 260 pin SO-DIMM DDR4-3200 up to 64GB	DDR4-3200 up to 32GB
	HDD	1 x 2.5 internal SATA HDD bay			
	Network (LAN)	2 x Gigabit Ethernet ports (Supports Wake on LAN)			
	I/O ports	2 x RS-232 COM (RS-422/485)* 2 x USB 2.0/ 1 x USB 3.0 2 x Gigabit Ethernet (RJ-45) (M12 waterproof connector)			
	Bus expansion	Full-size MiniPCIe / M.2	Full-size MiniPCIe / mSATA	1 x E-Key 2230 (PCIe x1, USB2.0, I2C) M.2 B-Key 1 x B-Key 3042 (USB2.0) w/ Nano-SIM M.2 M-Key 1 x M-Key 2280 (PCIe x4 Gen.4 for PCIe SSD), optional SATA	1x E-Key for wireless module (Type: 2230) optional B-Key for LTE module 1x M-Key support SATA M.2 2242 module
	Mounting	VESA 100 x 100 mm			
	Dimensions (W x H x D)	540 x 336 x 70 mm			
	Weight	10.5 kg (23.14lbs)			
OS Support		Win 10 IoT Enterprise Android 8.1 Linux Ubuntu 18.04	Win 10 IoT Enterprise Linux Ubuntu 18.04		Win 10 IoT Enterprise Android
Environmental Specifications	Operating Temperature	-10 ~ 50 °C			
	Relative Humidity	10 ~ 95% @ 40° C non-condensing			
	Vibration	0.5G			
	Shock	5G peak acceleration (11 msec. duration)			
	EMC/ Safety	CE, FCC, UL, CB, CCC, BSMI			
	System Protection	IP65 Full System			
Power Supply	Input Rating	DC input 24V / 5A			
	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 (um)	248.25 (H) x 248.25 (V)			
	Brightness (cd/m²)	250 Nits, Optional 400 and 1200 Nits Panel			
	View Angle	178°/178°			
	Camera	Optional			
	Light Sensor w LED Indicator	Optional			
Touch Screen Option (PE/GE)	Type	Projected Capacitive. Glass Panel (7H Hardness)			
	Cover Glass Surface Treatment	Optional (AR / AG / Vandal Proof)			
	Light Transmission	88% ± 2%			
	Controller	USB Interface			

ADVANTECH Interactive Self-service Terminals   VICPAS HMI Parts Center

All product specifications are subject to change without notice. Last updated: 21-Feb-2023

Dimensions

Unit: mm

UTC-520GT-ATB0E

504.64

539.04

Light Sensor
Camera / LED

335.31

44.00
27.40

97.92

326.00

186.00

132.32
162.32
192.32
222.32
252.32
282.32
312.32
342.32

Ordering Information

Part No.	Description
UTC-520GT-ATB0E	21.5" PCT.T/S with Pentium N4200, 4GB RAM, 64G SSD, IP66/69K
UTC-520FT-ATB0E	21.5" PCT.T/S with i5 6300U, 4GB RAM, 64G SSD, IP66/69K
UTC-520IT-ATB0E	21.5" PCT.T/S with i5-1145G7E, 4GB RAM, 64G SSD, IP66/69K
UTC-520JT-ATB0E	21.5" PCT.T/S with Intel® Celeron® J6412, 4GB RAM, 64G SSD, IP66/69K
1702002605	Power cord 2P FRANCE 10A/16A 220V 1.83M 90D
1702002600	Power Cord 3P UL/CSA(USA) 125V 10A 1.83M 180D
1700000596	Power Cord (China) CCC,10A 250V, 3P 1.83M
1700018704	Power Cord UK BSI 2P 10A 250V 1.8M 18AWG
Y5A0520000	Cable M-DIN 4P(F)/waterproof 5P 1M
Y5A0520001	A cable RJ45-8P8C/waterproof 8P 1M
Y5A0520002	M cable waterproof /USB-A 4P*2 1M
Y5A0520003	M Cable USB-A 9P(F)/Waterproof USB 9P(M) 1M
Y5A0520004	M Cable 1*9 P D-SUB/waterproof 10P 1M

Fully- Integrated I/O (UTC-520 IP66/69K)

H G F E D C B A
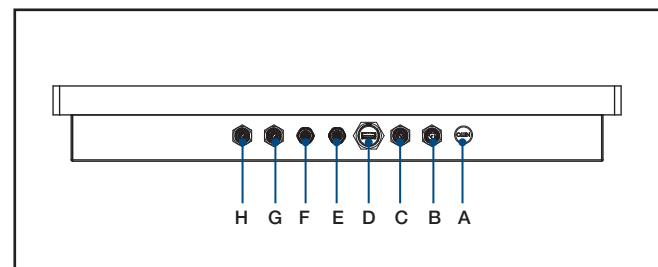
A. Exhaust Valve
B. Power Connector
C. USB 2.0 x 2
D. USB 3.0 x 1

E. LAN 1
F. LAN 2
G. COM 1
H. COM 2

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
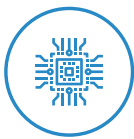
Devices & Hardware
- Windows, Linux, Android
- Hardware, storage, battery

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

Client Devices		LAN	DeviceOn Server	Internet	Browser
Hardware	Software	Peripherals	Cloud	On-site installation	Monitor status	Controls

Client Devices

Free Installation
Via the Advantech website

DeviceOn Server

Download Installer
Via the Advantech website

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

Browser

Free Installation
Via browser