

8" Windows Vehicle Mount Computer with Intel® Alder Lake-N97 Processor

Overview

The VT-677WK is a ruggedized vehicle-mounted computer with Intel® Alder Lake-N97 processor and Windows 11 OS, offering full Windows computing power in a mobile environment. It features an 8-inch industrial touch screen, an integrated QWERTY keyboard, built-in Wi-Fi 6E, Bluetooth 5.3, 4G/5G, GNSS, and 8 to 36V DC input, making it suitable for warehousing, logistics, and container trucks. It meets MIL-STD-810H for anti-shock/vibration and IP65 for dust/water resistance, allowing operation in demanding environments.

Features

- 8" TFT-LCD with projective capacitive touch screen
- Front panel integrated QWERTY keyboard
- Rugged aluminum enclosure and fanless design
- IP65 protection against water and dust
- Compliant with MIL-STD-810H vibration testing standards
- Wide range 8 to 36VDC power input
- Flexible expansion capability for Wi-Fi 6E, Bluetooth 5.3, LTE, 5G, GNSS



I/O Interfaces

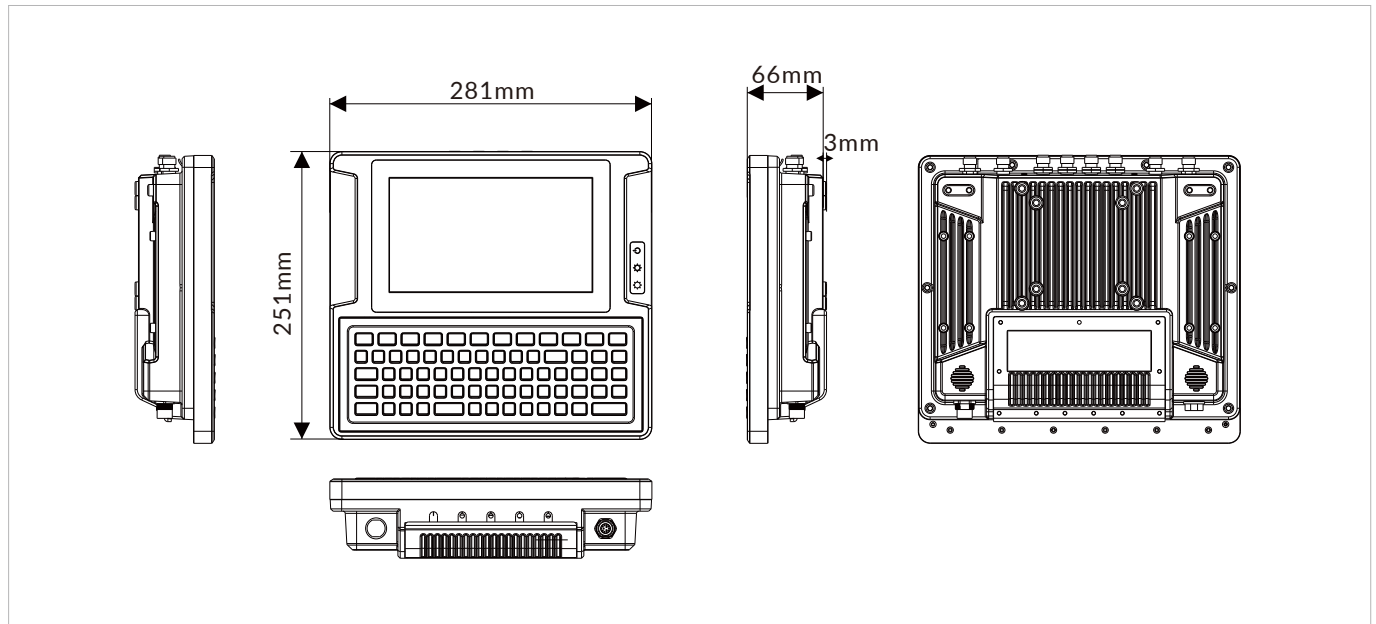


Specifications

Display	
Size	8 inch (16:9)
Touch Type	Projected capacitive multi touch
Display Type	TFT LCD
Resolution	1280 x 720
Luminance	750 nits
Contrast Ratio	1000: 1
View Angles	85 (left), 85 (right), 85 (up), 85 (down)
Color	16.2M
System	
CPU	Intel® Alder Lake-N97, Intel 7, 4-core, up to 3.6GHz
Chipset	Intel® Alder Lake-N Platform
Memory	1x DDR4-2666 SO-DIMM (up to 16GB)
Storage	1x M.2 2280 SATA SSD (up to 2TB)
Graphics	Intel® UHD Graphics
BIOS	AMI UEFI BIOS
Keypad & Keyboard	
Keyboard	70-keys QWERTY keyboard F1-F24 function keys, 0-9 number and A-Z alpha keys All keys LED backlight, independent switch control, day and night mode
I/O Ports	
USB	4x USB 3.0 (Type A) 2x USB 2.0 (Type A)
Serial	2x RS-232 (COM1/2, M12)
Ethernet	2x GbE LAN (RJ45)
Audio	3.5mm Audio Jack (Mic-in/Line-out)
SIM Card Slot	1x SIM Socket
Antenna	2 to 8x TNC connector for external antenna (Wi-Fi, Bluetooth, WWAN, GPS)
RF Communication	
Wi-Fi	Wi-Fi 6E: 802.11a/b/g/n/ac/ax, 2.4G/5G/6G (optional)
Cellular	4G, LTE (optional) 5G, NSA/SA (optional)
Bluetooth	Bluetooth 5.3 (depends on Wi-Fi 6E, optional)
GNSS	GPS, GLONASS, Galileo, BeiDou (optional, Ublox NEO M8N)
Audio	
Speaker	8Ω/2W, dual studio speakers
Power	
DC Input	8 to 36VDC
Power Consumption	18W (Typ.)
Power Mode	ATX (default), AT
Operating System	
Windows	Windows 11 IoT Enterprise LTSC Windows 10 IoT Enterprise LTSC Windows 11 Pro Windows 10 Pro

Mechanical	
Dimensions (W x D x H)	281 x 251 x 69 mm (11.06 x 9.88 x 2.72 inches)
Weight (N.W.)	3.25 kg (7.17 lbs)
Mounting Mode	VESA 75 and 100
Material	Die-casting Aluminum with Heavy Duty Metal
Environment	
Operating Temperature	-30 to 60°C (-22 to 140°F)
Storage Temperature	-40 to 70°C (-40 to 158°F)
Relative Humidity	95% @ 70°C (158°F), non-condensing
Shock	MIL-STD-810H Method 514.8 Procedure I
Vibration	MIL-STD-810H Method 516.8 Procedure I
IP Rating	IP65 compliant
Certification	
EMC	CE, FCC

Dimensions



Ordering Information

Part No.	Description
VT-677WK-D000	VT-677WK, 8"(P-cap), N97, Barebone
VT-677WK-D100A-A01	VT-677WK, 8"(P-cap), WiFi6E, Bluetooth, 2xTNC
VT-677WK-D400B-A01	VT-677WK, 8"(P-cap), WiFi6E, Bluetooth, 4G (CN), GPS, 4xTNC
VT-677WK-DE00B-A01	VT-677WK, 8"(P-cap), WiFi6E, Bluetooth, 4G (EU), GPS, 4xTNC
VT-677WK-DG00B-A01	VT-677WK, 8"(P-cap), WiFi6E, Bluetooth, 4G (US), GPS, 4xTNC
VT-677WK-DH00B-A01	VT-677WK, 8"(P-cap), WiFi6E, Bluetooth, 4G (JP), GPS, 4xTNC
VT-677WK-D600C-A01	VT-677WK, 8"(P-cap), WiFi6E, Bluetooth, 5G (CN), GPS, 7xTNC
VT-677WK-DJ00C-A01	VT-677WK, 8"(P-cap), WiFi6E, Bluetooth, 5G (Global), GPS, 7xTNC

Optional Accessories

Part No.	Description
A.02.002.000096	DC power cord, 0P to 3P, M12-3P-Female, 2.0meters, RBY, 90°, 3CZ01029316, for VT/PWR input
A.03.004.001584	External cable(2xRS232), 150mm, M12/12P(M) to 2xDB9(M) Connector, 3CZ01029383
A.02.004.000002	Rod antenna, TNC(Female), 3dB
A.02.004.000090	GPS antenna, TNC(Male), 3.0meters
C.02.009.000232	AC adapter(FSP), 110 to 240VAC Input, 12VDC/7A Output, M12 connector
C.02.099.000007	AC Power Cord (CN), 1.5meters
C.02.099.000008	AC Power Cord (US), 1.5meters
C.02.099.000009	AC Power Cord (UK), 1.5meters
C.02.099.000010	AC Power Cord (EU), 1.5meters