VT-858K

DARVEEN

12.1" Windows Vehicle Mount Computer with Intel® Celeron® Processor
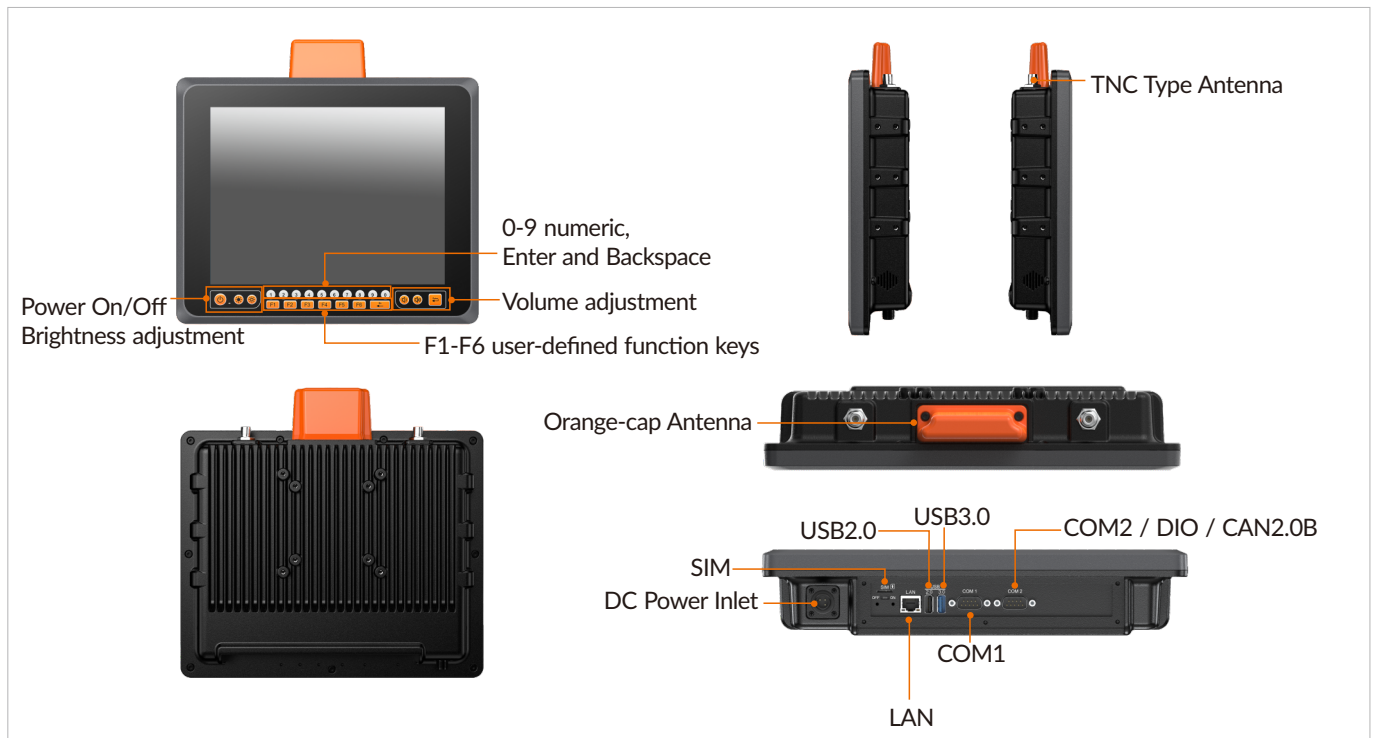
Overview

The VT-858K is a ruggedized vehicle-mounted computer powered by an Intel® Celeron® processor and built with a 12.1-inch industrial resistive/capacitive touchscreen and numeric/function keys. It offers the choices of Windows-based OS, ensuring compatibility with most applications and optimizing network management systems. The VESA 75 and 100 mounts make installation in forklifts, cranes, trucks easy, while flexible WiFi 6E, Bluetooth V5.3, 4G LTE/5G, GNSS, CAN2.0B expansion options ensure always connected. Furthermore, it has an 8 to 36V wide-range DC input with power ignition function, allowing it to adapt to different power systems. It complies with the MIL-STD-810G military standards for shock and vibration resistance, and it is IP65 rated for protection against dust and water, ensuring its reliability in challenging environments.

Features

- 12.1" TFT-LCD with resistive or projected capacitive touchscreen
- Front panel integrated with numeric and function key control
- Rugged aluminum enclosure and fanless design
- IP65 protection against water and dust
- Compliant with MIL-STD-810G vibration testing standards
- Wide range 8-36VDC power input with ignition control
- Flexible expansion capability for Wi-Fi 6, Bluetooth 5.3, LTE, 5G, GPS, CAN2.0B

I/O Interfaces
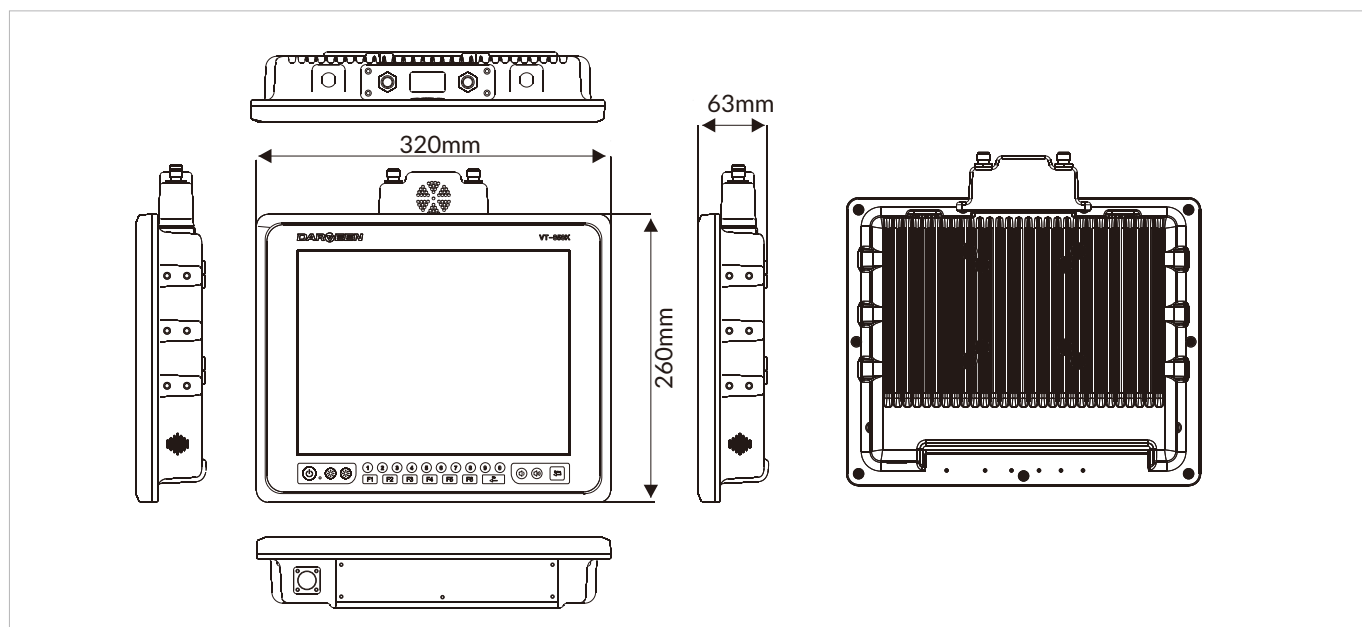

Power On/Off
Brightness adjustment

0-9 numeric, Enter and Backspace

Volume adjustment

F1-F6 user-defined function keys

TNC Type Antenna

Orange-cap Antenna

USB2.0
USB3.0
COM2 / DIO / CAN2.0B
SIM
DC Power Inlet
COM1
LAN

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Specifications

Display	
Size	12.1 inch (4:3)
Touch Type	VT-858K: 5-wire resistive touch, VT-858KC: Projected capacitive multi touch
Display Type	TFT LCD
Resolution	1024 x 768
Luminance	500 nits
Contrast Ratio	700: 1
View Angles	80 (left), 80 (right), 80 (up), 80 (down)
Color	16.2M
System	
CPU	Intel® Celeron® J1900 processor (quad core, 2.0 GHz)
Chipset	Intel® Atom® and Celeron® Processor SoC
Memory	4GB DDR3L-1333 SO-DIMM (up to 8GB)
Storage	128GB mSATA SSD (up to 512GB)
Graphics	Intel® HD Graphics
BIOS	SPI BIOS
Keypad & Keyboard	
Keyboard	Power on/off Brightness and volume adjustment 0-9 numeric, Enter and Backspace F1-F6 user-defined function keys Power LED indicator
I/O Ports	
USB	1x USB 2.0 (Type A) 1x USB 3.0 (Type A)
Serial	1x RS-232/422/485 (COM1 supports 5V/12V, DB9) 1x RS-232 (COM2 supports 5V, DB9)
Ethernet	1x GbE LAN
SIM Card Slot	1x Nano SIM socket
DIO	4x DI + 2x DO (optional, with 3.3V, replace COM2 port)
CAN bus	2x CAN2.0B (optional, supports J1939 protocol, compatible-layout with COM2 port)
Antenna	2-4x TNC connector for external antenna (Wi-Fi, Bluetooth, WWAN, GPS)
RF Communication	
Wi-Fi	Wi-Fi 5: 802.11a/b/g/n/ac, 2.4G/5G (optional) Wi-Fi 6E: 802.11a/b/g/n/ac/ax, 2.4G/5G (optional)
Cellular	4G, LTE (optional) 5G, NSA/SA (optional)
Bluetooth	Bluetooth 4.0/5.3 (optional)
GNSS	GPS, GLONASS, Galileo, BeiDou (optional, Ublo x NEO M8N)
Audio	
Speaker	8Ω/2W, mono speaker
Power	
DC Input	8 to 36VDC
Power Consumption	16W (Typ.)
Ignition On/Off	Power on delay, default 10 seconds Power off delay, default 10 seconds (on/off delay time can be changed via BIOS setting)
Battery	7.2V 3350mAh (optional)
Power Mode	ATX (default), AT
Operating System	
Windows	Windows 10 IoT Enterprise LTSC Windows 10 Pro

VT-858K

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Mechanical	
Dimensions (W x D x H)	320 x 260 x 63 mm (12.6 x 10.24 x 2.48 inches)
Weight (N.W.)	3.8 kg (8.4 lbs)
Mounting Mode	VESA 75 and 100
Material	Die-casting aluminum with heavy duty metal
Environment	
Operating Temperature	-20 to 60℃ （−4 to 140°F)
Storage Temperature	-40 to 70℃ （−40 to 158°F)
Relative Humidity	95% @ 70℃ (158°F), non-condensing
Shock	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I
IP Rating	IP65 compliant (I/O interface must be closed)
Certification	
EMC	CE, FCC

Dimensions

Optional Accessories

Part No.	Description
PWR836D512-M12	8 to 36VDC Input, 5V/12VDC Output, M12 connector

Ordering Information

Part No.	Description
VT-858K-C105A-A001	VT-858K with Intel® Celeron® J1900, 12.1" resistive touchscreen LCD, 4GB RAM(Apacer), 128GB mSATA(HIK), WiFi(PE15N), TNC(L)-WiFi_M, TNC(R)-WiFi_A
VT-858KC-C105A-A001	VT-858K with Intel® Celeron® J1900, 12.1" capacitive touchscreen LCD, 4GB RAM(Apacer), 128GB mSATA(HIK), WiFi(PE15N), TNC(L)-WiFi_M, TNC(R)-WiFi_A