



VT-776W User's Manual



2024/7/2 Ver: 1.0

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Chapter 1. About this Manual

1.1 Introduction

This is a user manual about VT-776W, which mainly includes introduction, application environment of the product, description of appearance, product characteristics, technical parameters, setting of common functions, machine installation, matters needing attention and after-sales common problem diagnosis. This manual is designed to help users solve problems encountered in the process of use, please be sure to read this manual in detail, so as to better use the VT-776W.

1.2 User and Product Safety

• Never use strong pressure onto the screen or subject it to severe impact, as the LCD panel could become cracked and possibility cause personal injury. If the LCD panel is broken, never touch the liquid inside because the liquid irritates the skin.

• Although the VT has passed the test of IP66 standard for water and dust resistance, avoid prolonged exposure to rain or other concentrated moisture. Such condition exceeds the IP66 standard, and could result in water or other contaminants entering into the VT.

• Use only the original approved AC/DC Adapter with the VT. Use of an unapproved AC/DC Adapter could result in electrical problems, or even cause a fire or electrical shock to the user.

• Do not disassemble the VT. Servicing should be done by supplier only. If the VT or accessories gets damaged due to wrong handling or unauthorized repair, warranty is void. In case the warranty seals are broken, warranty is void too.

• Make regularly back-up of all important data.

• Under no circumstance will supplier be liable for any direct, indirect, consequential or incidental damages baring out of the use or inability to use the hardware and software and/or any data loss, even if supplier has been informed about the possibility of such damages.

1.3 Recycling & disposal instructions



Do not throw this product in the home waste bin.

1.4 Regulatory information

For CE, FCC, RoHS and other Document of Conformities, consult the Contact Window of Darveen Computer.

1.5 Product application scenario

VT-776W is the latest generation of rugged vehicle mounted computer that comes with Intel Celeron J6412 platform processor and Windows 11 operating system, It is designed for warehouse forklift ,Port and Container Yards, Manufacturing Logistics,Heavy Duty Vehicle and Fleet Management.

Chapter 2. Description of Product

2.1 Overview

VT-776W is the latest generation of rugged vehicle mounted computer that comes with Intel Celeron J6412 platform processor and Windows 11 operating system. The VT-776W harnesses full Microsoft® Windows® computing power in a mobile environment, optimizing application and network management compatibility, while remaining flexible enough to run multiple advanced applications.VT-776W assembly 10.1-inch industrial resistive/capacitive touch screen, built-in WiFi 6E, Bluetooth5.3, 4G LTE / 5G, GPS/GNSS/Beidou, 8~36V wide-range DC input adapt it to the warehousing forklift, logistics, container trucks and so on. Meet the STD-MIL-810H of anti-shock and vibration, IP66 dust and water proof standard make it operaing freely in the most demanding environment.These features as:

- 10.1" TFT-LCD with resistive touch/projective capacitive touch screen
- Front panel intergrated numeric and function keys control
- Rugged aluminum enclosure and fanless design
- IP66 protection against water and dust
- MIL-STD-810H vibration testing standards compliant
- Wide range 8-36VDC power input with ignition control
- Flexible expansion capability for Wi-Fi 6E, Bluetooth 5.3, LTE, 5G, GNSS, CAN2.0B





Key Button Area

2.2 General View of the VT-776W

2.2.1 I/O Interfaces



2.3 Power Supply Connector

VT-776W internal power supply can accept DC input voltages in the range of 8 to 36V DC.



2.4 System Specifications

The VT-776W detailed specifications as follows. Unless otherwise noted, all the specifications are subject to change without prior notification.

VT-776W			
Processor	- Intel® Celeron J6412, quad core (2.0GHz)		
Memory	- 4GB DDR4-2666 SO-DIMM (up to 32GB)		
Storage	- 128GB M.2 SSD (up to 2TB)		
Operating System	- Windows 11 IoT Enterprise LTSC - Windows 10 IoT Enterprise LTSC - Windows 10 Pro		
Display	 10.1 inch (16:10) TFT LCD 350 cd/m² Brightness SVGA 1920 x 1200 Resolution 		
Touch Panel	- Projected capacitive multi touch,5-wire resistive touch (Optional, by request)		
Input / Output Ports	 1x RS-232/422/485 (COM1 supports 5V/12V, DB9) 1x RS-232 (COM2 supports 5V, DB9) 2 x USB3.0(Type A) 1 x GbE LAN (RJ45) 1x SIM Socket 2 ~ 8x TNC connector for external antenna (Wi-Fi, Bluetooth, WWAN, GPS) 		
Audio	- 3.5mm Audio Jack (Mic-in/Line-out)		
Speaker	- 8Ω/2W, dual studio speakers		
Wi-Fi	- Wi-Fi 6E: 802.11a/b/g/n/ac/ax, 2.4G/5G/6(Optional)		
Cellular	- 4G LTE (Optional) - 5G NSA/SA (Optional)		

Bluetooth	- Bluetooth 5.3 (Optional)
GNSS	- GPS, GLONASS, Galileo, BeiDou (Optional, Ublox NEO M8N)
Keyboard	 Power ON/OFF Brightness Adjustment Power LED Indicator
Power System	 DC Input: 8~36V DC Power Consumption: 18W Typ. Mode:ATX (default), AT
Battery	- 7.2V 3350mAh (optional)
Dimensions and Weight	- Dimensions (W x D x H):280 x 210 x 46 mm (11.02 x 8.27 x 1.81 inches) - Weight(N.W.) : 2.2 kg (4.85 lbs)
Material	- Die-casting Aluminum with Heavy Duty Metal
Certification	- EMC: CE, FCC

2.4 Environment Standard

Operating Temperature	-20 to 60°C (-4 to 140°F)
Storage Temperature	-40 to 70°C (-40 to 158°F)
Mounting Mode	VESA 75 and 100
RelaAve 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
Water & Dust proof	IP66 compliant (I/O interface must be closed)

Chapter3. Function Using

3.1 Key Operation

3.1.1 Turn on the VT-776W

Press the power button to turn on the VT-776W. If the VT-776W does not power on, check the power supply has been connected normally and you should try again.





When the VT-776W is powered on, it's operating system starts up. A splash screen of Darveen logo appears for a short period of time followed by the Windows 10 desktop window.



3.1.2 Adjust brightness and volume

When the VT-776W is powered on and login Windows system, you can adjust screen brightness manually by pressing the button on the front of VT-776W.







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Label nr.	Description
1	LCD panel
2	Keypad for power on/off, brightness control buttons

3.2 WiFi

1.Click the network signal icon in the lower right corner of the desktop, select the Expand button and view the list of wireless signals.



2.Select the WiFi signal you want to connect to and enter the correct password.





3. The wireless network is properly connected and you can use the wireless network to surf the Internet.

3.3 Bluetooth

3.3.1 Turn on the Bluetooth

1. Tap the network signal icon in the lower right corner of the screen, Click the right mouse button on the Bluetooth icon to enter the Bluetooth setting interface.



2.In the "Bluetooth & devices", Turn on the "Bluetooth".

C Settings PC Local Account	- Bluetooth & devices	o ×
Find a setting Q	View more devices	
System Bluetooth & devices	Bluetooth Discoverable as "DESKTOP-280M15A"	
 Network & internet Personalization 	Devices Mouse, keyboard, pen, audio, displays and docks, other devices Add device	>
📑 Apps 💄 Accounts	Printers & scanners Preferences, troubleshoot	>
 Time & language Gaming 	Phone Link Instantly access your Android device's photos, texts, and more Open Phone Link	>
 Accessibility Privacy & security 	Cameras Connected cameras, default image settings	>
 Windows Update 	0 Mouse Buttons, mouse pointer speed, scrolling	>
	Couch Gestures, scroll, zoom, taps	>
0		55 PM 1

3.3.2 Connect to the Bluetooth

1. Click "Add device" and select the type of the Bluetooth device to be added.



2.Click the Bluetooth device to be connected, and you will see a matching PIN pop up. After confirming that VT-776W is the same as the matching PIN on the device to be connected, click "**Connect**" to match successfully, and then you can start to use Bluetooth to send and receive files.

← Settings	Add a device X	- 0 X
PC Local Account	Add a device	
Find a setting	Make sure your device is turned on and discoverable. Select a device below to connect.	
System	Luknown device	
8 Bluetooth & devices	Unknown device	On 💽
 Network & internet Personalization 	EDIFIER BLE	Add device
AppsAccounts	DARVEENPC Connecting Press Connect if the PIN on DARVEENPC matches this one.	>
5) Time & language	133220	Open Phone Link >
 Gaming Accessibility 	Connect Cancel	>
Privacy & security	J. Unknown device	
Windows Update	Cancel	>
	Couch Gestures, scroll, zoom, taps	>
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3.In the "**Bluetooth & devices**" interface, click "**Send or receive files via Bluetooth**" to open the Bluetooth file transfer interface.

← Settings		- o ×
PC Local Account	Bluetooth & devices > Devices	
Find a setting Q	Download over metered connections Device software (drivers, info, and apps) for new devices will download when you're on metered internet connections—data charges may apply	Off
System	Related settings	
🚯 Bluetooth & devices		
▼ Network & internet	¢)) Sound	>
/ Personalization		
Apps	Display	>
e Accounts	Send or receive files via Bluetooth	ß
🕤 Time & language	Send of receive mes via bluetooth	
🐵 Gaming	More Bluetooth settings	ß
🕇 Accessibility		
Privacy & security	More devices and printer settings	Ø
Ø Windows Update		
	A Get help✓ Give feedback	
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4. Receive the files. Before other devices send files to VT-776W, click "**Receive File**" below to wait for the files to be received.

\leftarrow	Settings		- 0 X
	PC Local Account	Bluetooth & devices > Devices ×	
		Bluetooth File Transfer	
Find	d a setting	Transfer files using Bluetooth	Off •
	System	You can use Bluetooth technology to transfer files wirelessly between this computer and a Bluetooth device, or between this computer and another Bluetooth enabled computer.	
I 🚯	Bluetooth & device	To continue, select if you would like to send or receive files.	
-	Network & interne		>
/	Personalization	→ Send files Make sure the computer or device where you plan to send the files is turned on and ready to receive them.	>
	Apps		,
•	Accounts	→ Receive files This will allow your computer to receive files sent from another Bluetooth enabled	C
5	Time & language	computer or device.	
+**	Gaming		Ø
X	Accessibility		
\square	Privacy & security		Ø
6	Windows Update	Next Cancel	
		Get help	
		Give feedback	
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← Settings	- 0 ×
Pc Bluetooth & devices > Devices ×	
	 On C
 Network & interne Personalization Apps Accounts 	Off
S Time & language Image: Search and Sear	>
Windows Update Next Cancel Send or receive files via Bluetooth	0
33°C 3°C <td>(分) 3:38 PM 6/21/2024 3</td>	(分) 3:38 PM 6/21/2024 3

5. Send files. Before sending the file of VT-776W to other devices, please click "Send File" .

← Settings	- ō ×
Pc Bluetooth & devices > Devices X	
Find a setting Transfer files using Bluetooth	Off
System You can use Bluetooth technology to transfer files wirelessly between this computer and a Bluetooth device, or between this computer and another Bluetooth enabled computer.	
Bluetooth & device To continue, select if you would like to send or receive files. Network & internet To continue, select if you would like to send or receive files.	>
 ✓ Personalization → Send files Make sure the computer or device where you plan to send the files is turned on and ready to receive them. 	>
Accounts Accounts Accounts This will allow your computer to receive files sent from another Bluetooth enabled computer or device.	ß
Gaming Accessibility	Ø
Privacy & security	Ø
Windows Update Get help Give feedback	
33°C Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	(分句) 3:36 PM 3 6/21/2024 3

6.Select the device you want to send to and click "Next".

← s	Settings		
	PC Local Account	Bluetooth & devices > Devices ×	
		🔶 🟮 Bluetooth File Transfer	Off
Find	a setting	Select where to send your files	Off U
	System	DARVEENPC DESKTOP-2020081	
ا 8	Bluetooth & device	Laptop Desktop PC	
-	Network & interne	DE-SKTOP-J3SEJ9N Desktop PC DL-720WFB06 Printer	>
/	Personalization	HUAWEI-MATABOOK	>
	Apps		
•	Accounts	18/155102666 Printer	Ø
D	Time & language		
•	Gaming	Use authentication to ensure that you are sending the file to the correct device. The authentication also protects the file from being viewed by others while it is sent to the other device.	Ø
X	Accessibility	Use authentication	
\bigcirc	Privacy & security		Ø
3	Windows Update	Next Cancel	
		let help	
		Give feedback	
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↓ ↓ €	8 Bluetooth File Transfer				×	
Im	Select the files to sen	d				
	To choose files, click B	rowse.				
	File names:	Untitled.png		Browse		
				Next	Cancel	
			u			
0	∏ 1024 × 76	i8px 🖹 Size: 103.0KB			100% —	-•

7. Click "Browse" and select the file to be sent, and wait for the file to be sent.

PC	Blue	etooth & devic	:es → Devices	×	
÷	🛞 Bluetooth File Transfer				
tting	File successfully transf	arrad			Off
tem	The successfully trainsh	eneu			
etooth & device					
work & internet					
sonalization	Sent to: D	ARVEENPC			
	Files sent: File Name	Size			
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ndows Update				Finish	
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3.4 4G/5G

3.4.1 Installation of SIM Card

1.Insert the SIM card into the VT-776W. The SIM card slot is push-pull. The SIM card slot position is as follows.



SIM Slot

Note: Please ensure that the machine is completely powered off before inserting and removing the SIM card.

2. Click the network icon in the lower right corner of the desktop, and left click the mobile network icon to enable the mobile network connection function.



3.4.2 4G/5G setting

1.If the network connection is normal after the SIM card is installed, select "**Allow Windows to keep me connected**" to complete the connection.



2.If the connection is not successful, click "More operator settings" in the figure below to enter the "Network &Internet".

\leftarrow Settings		-	ο×
PC Local Account	Network & internet > Cellular		
	When entering a roaming area, your data connection will be turned off	Don troum	
Find a setting Q	Use cellular instead of WI-Fi We'll switch to cellular when your WI-Fi connection is poor (may incur charges)	When Wi-Fi is poor	~
System			
Bluetooth & devices	More cellular settings		
Vetwork & internet	Cellular data and apps		>
Personalization			
Pps Apps	Mobile operator settings		>
Accounts			
🕤 Time & language	Related		
🚥 Gaming	Operator messages		Ø
🕇 Accessibility			
Privacy & security	Learn more		Ø
Ø Windows Update			
	 Ĝet help ✔ Give feedback 		
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3.Select "Add APN", enter the APN corresponding to the SIM card of each operator in the interface of editing access point, and save the APN of each operator is different. The APN of China Mobile is generally "cmnet", China Unicom is "**3gnet**", and China Telecom is "ctnet". After the APN is set, the power off and restart, You can connect to your mobile network and surf the Internet normally.

Settings				Callul	ar > (Onerete	
PC Local Account	Netwo	ork & ir	nternet > (Cellula		Operator	r settings
Find a setting	Q. Cellular	connection pro	ofile			China T	elecom ~
System	APN set	tings					Add APN
 Bluetooth & devices Network & internet 	((*)) In	nternet APN					^
 Personalization Apps 		efault APN ctivated					
Accounts	Propertie	es					^
 Time & language Gaming Accessibility Privacy & security Windows Update 	M Fi D IN IN	lanufacturer: lodel: irmware: letwork type: ata class: //El: //El: //Sl: IM ICCID:	Quectel QUECTEL Mobile Bri EC20CEFILGR08A01 3GPP GPRS, EDGE, UMTS, 869128062125868 460115527708352 89861123347756017	M1G HSDPA, HS			Сору
33℃ 多云	Security	• •	i C i	a (\$	▲ ENG	Use SIM PIN , III (다)) 3:50 PM 6/21/2024
	Edit a	n APN	20	<i>a</i> (3:50 PM
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Settings PC Local Account ind a setting	Edit al Profile na China	n APN ame Telecom				Operator	- □ r settings
Settings PC Local Account and a setting System Bluetooth & devices	Edit al Profile na China APN ctnet User nan	n APN ame Telecom				Operator	
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4. If the connection is successful, the following information is displayed.

3.5 GPS

3.5.1 Guidelines for the Use of GPS

1.Install GPS antenna on antenna interface (**marked GPS**) of VT-776W. You can buy antennas with better signals. Install those on the antenna interface.



Antenna Interface

3.5.2 GPS Connection

1.You can get GPS information by this serial port.Select the COM, which you can view the virtual COM number of the GPS module in the "**Device Manager**".



2. The GPS module receives the signal and transmits it to the windows system by COM port. The baud rate is **9600bps**.



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	230'400	- 8					ONE DE DE LOS DE						-			Satelites				
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3.If the device is working correctly, the display will show information about the satellite constellation, signal to noise ratio, time.

Player	Receiver	Tools Window Help
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Chapter4. Accessories and Power connection

4.1 Check the package

Open the package and check all the parts are inside without shortage and damage.

A. VT-776W (Main Unit)

Standard package is including a VT-776W main unit and a power cable.

1	Main unit	VT-776W	E B B
2	Power cable	PC-03M-20-ACC	Q

B. Accessories (Optional)

According to the use of different environment, you can choose some different parts, the list is as below:

1		PWR220A12-M12 * AC-DC Adapter * 100~240V AC Input, 12V/5A DC Output	
2	Power Adapter	PWR836D512-M12 * DC-DC Adapter * 8~36V DC Input, 12V/3A and 5V/2A Output	223
3		PWR1872D512-M12 * DC-DC Adapter * 18~72V DC Input, 12V/3A and 5V/2A Output	2 2 2 3 J
4		RAM-MOUNT-02 * Universal Adjustable * Marine Grade Aluminum * VESA Standard (75x75mm and 100x100mm)	A
5	Mounting Kits	DV-MOUNT-1002 * Forklift Roof Mounting Kits * Universal Adjustable * Marine Grade Aluminum * VESA Standard (75x75mm and 100x100mm)	

		DV-MOUNT-2002	
		* Forklift U-shaped Mounting Kits	
6		* Universal Adjustable	
		* Marine Grade Aluminum	
		* VESA Standard (75x75mm and 100x100mm)	
		DV-MOUNT-60	Ŧ
		* Lifting Mounting Kits	
7		* Stainless Steel Material	
1		* Lifting Height Adjustable Range 50~100cm	ľ
		* VESA Standard Holes(75x75mm &	
		100x100mm)	
8		PC-03M-20-ACC	Q
9	Power cable	PC-23MM-20	
10		PC-23MM-20-ACC	
		Rubber Duck Antenna	
11		ANT- R3S	
		SMA(Female), 3dB, Universal	
	_	Rubber Duck Antenna	1
12		ANT- R3T	
	Antenna	TNC(Female), 3dB, Universal	/
	-		
		Rubber Duck Antenna	
13		ANT- R4T	
		TNC(Female), 2~4dB, Cisco	
			122

14		<i>Magnetic Mount Antenna</i> ANT-S7S SMA(Female), 7dB, 5meters long	
15		<i>Magnetic Mount Antenna</i> ANT-S7T TNC(Female), 7dB, 5meters long	
16		<i>Fiberglass Antenna</i> ANT-G5N N(Female), 5dB, 0.3meters long	r.
17		<i>GPS Antenna</i> ANT-GPSS SMA(Female), 3meters cable, GPS	
18		<i>GPS Antenna</i> ANT-GPST TNC(Female), 3meters cable, GPS	
19		<i>GPS Antenna</i> ANT-GNSSS SMA(Female), 3meters cable, GPS&GNSS	
20		<i>GPS Antenna</i> ANT-GNSST TNC(Female), 3meters cable, GPS&GNSS	
21	Industrial Keyboard	DKB-70 * 70 Keys QWERTY Full-function Keyboard * LED Backlight, Independent Swich Control * F1-F20 Function Keys, 0-9 Numeric and A-Z Alpha Keys * IP66 Waterproof * Support Windows and Andriod Operating System	

22	Keyboard Mounting Bracket BK-VT1	
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4.2 Power Connection

4.2.1 Power Options

Before using the VT-776W, choose different power adapters for different vehicle power.

Power Options including:

- 12 VDC Vehicles (8-36VDC Direct Connection) Direct connection to vehicle power.
- 24 VDC Vehicles (8-36VDC Direct Connection) Direct connection to vehicle power.
- 48 VDC Vehicles Requires the use of a DC-DC power supply.
- 80 VDC Vehicles Requires the use of a DC-DC power supply.
- External AC/DC Power Supply For use when DC power supply is not available to power the VT-776W, such as in an office environment.

4.2.2 Power Cable Identification

PC-03M-20-ACC

Power cable with straight connector and 4 wires, 2 meters long:



M12 Connector	Wire Color	Connection	
P1	Red	DC+ (8-36 VDC)	
P2	Yellow Green Ignition Input (Optional)		
P3	Black DC-		
Case	Black	Ground	

Note: PC-03M-20-ACC cable is use for direct connection from vehicle power to VT-776W or DC-DC power input.

PC-23MM-20

Power cable with straight connector, 2 meters long:



<u>P2</u>

P1	

M12 Connector(P1)	M12 Connector(P2)	Connection	
P1	P1	DC+ (8-36 VDC)	
(NC)	P2	Ignition Input (Optional)	
P3	P3	DC-	
Case	Case	Ground	

Note: PC-23MM-20 cable is use for connection from VT-776W to DC-DC power output, just without power ignition function.

PC-23MM-20-ACC

Power cable with straight connector and 1 wire, 2 meters long:



M12 Connector(P1)	M12 Connector(P2) Connection		
P1	P1 DC+ (8-36V DC)		
(Yellow)	P2	Ignition Input (Optional)	
P3	P3	DC-	
Case	Case	Ground	

Note: PC-23MM-20 cable is use for connection from VT-776W to DC-DC power output, also with power ignition function.

4.2.3 External Power Adapter Options

1. External AC-DC Power Supply

PWR220A12-M12

The optional external AC/DC power supply is for use in environments, such as an office, where DC power is not available.

PWR220A12-M12 is support 100V-240V ac input, provide 12V DC and 5A power output, the power connector is an M12 male type which can meet IP66 dust and water proof.

Note: The Darveen-approved AC/DC Power Supply and Adapter Cable are only intended for use in a 25°C (77°F) maximum ambient temperature environment.



Connect External AC/DC Power Supply

1. Connect the provided detachable cord set (all others must order cable separately) to the external power supply.

2. Plug cord set into appropriate, grounded, electrical supply receptacle (AC mains).

3. Connect the watertight connector end of the Adapter Cable to the VT-776W Power Connector by aligning the connector pins to the power connector; push down on the watertight connector and twist it to fasten securely.

4. Press the Power Button on the front of the VT-776W to turn on the VT-776W.

2. External DC-DC Power Supply

PWR836D512-M12

PWR836D512-M12 is an optional external DC/DC power supply, that is for use in vehicles provided 12V DC or 24V DC power. The power input and output connectors are M12 male type which can meet IP66 dust and water proof.



Input Port		Output Port 1		Output Port 2	
Pin	Signal	Pin	Signal	Pin	Signal
1	DC In+ (8-36 VDC)	1	DC Out+ (+5V/2A)	1	DC Out+ (+12V/3A)
2	NC	3	DC Out-	3	DC Out-
3	DC In-				

PWR1872D512-M12

PWR1872D512-M12 is an optional external DC/DC power supply, that is electronic isolation for use in the vehicles provided 48V DC power. The power input and output connectors are M12 male type which can meet IP66 dust and water proof.



Input Port		Output Port 1			Output Port 2	
Pin	Signal	Pin	Signal	Pin	Signal	
1	DC In+ (18-72 VDC)	1	DC Out+ (+5V/2A)	1	DC Out+ (+12V/3A)	
2	NC	3	DC Out-	3	DC Out-	
3	DC In-		·	·	·	

4.2.4 12-24 VDC Vehicles (8-36VDC Direct Connection)



Fuse Requirements:

WARNING - For proper and safe installation, the input power cable must be connected to a fused circuit on the vehicle. If the supply connection is made directly to the battery, the fuse should be installed in the positive lead within 5 inches of the battery's positive (+) terminal. The fused circuit requires a maximum time delay (slow blow) fuse with a current rating as noted below.

- For **12V DC** input, use a 10A slow blow fuse that has a DC voltage rating greater than 12VDC.
- For **24V DC** input, use a 6A slow blow fuse that has a DC voltage rating greater than 24VDC.



1. Connected vehicle directly.

(1) Use the ignition ON/OFF function.

Connect the watertight connector end of the power cable to the VT-776W power connector by aligning the connector pins to the power connector, push down on the watertight connector and twist it to fasten securely.



(2) Without the ignition ON/OFF function.

- a. Cut off the yellow wire (Ignition wire) on the power cord (PN: PC-03M-20-ACC);
- b. Connect the watertight connector end of the power cable to the VT-776W power connector by aligning the connector pins to the power connector, push down on the watertight connector and twist it to fasten securely.



2. Connected vehicle via DC-DC power adapter.

(1) Use the ignition ON/OFF function.

- a. Connect the watertight connector end of the power cable (PC-03M-20-ACC) to the PWR836D512-M12 power connector by aligning the connector pins to the power connector, push down on the watertight connector and twist it to fasten securely.
- b. Connect the watertight connector end of the power cable (PC-23MM-20-ACC) to VT-776W and PWR836D512-M12, then connect the yellow wire (ignition wire) to the vehicle ignition signal pin.



(2) Without the ignition ON/OFF function.

- a. Cut off the yellow wire (Ignition wire) on the power cord (PN: PC-03M-20-ACC);
- b. Connect the watertight connector end of the power cable (PC-03M-20-ACC) to the PWR836D512-M12 power connector by aligning the connector pins to the power connector, push down on the watertight connector and twist it to fasten securely.
- c. Connect the watertight connector end of the power cable (PC-23MM-20) to VT-776W and PWR836D512-M12.



4.2.5 48 VDC Vehicles (Connected via DC/DC power)



Fuse Requirements:

WARNING - For proper and safe installation, the input power cable must be connected to a fused circuit on the vehicle. If the supply connection is made directly to the battery, the fuse should be installed in the positive lead within 5 inches of the battery's positive (+) terminal. The fused circuit requires a maximum time delay (slow blow) fuse with a current rating as noted below.

• For **48VDC** input, use a 3A slow blow fuse that has a DC voltage rating greater than 48VDC.



- (1) Use the ignition ON/OFF function.
 - c. Connect the watertight connector end of the power cable (PC-03M-20-ACC) to the PWR1872D512-M12 power connector by aligning the connector pins to the power connector, push down on the watertight connector and twist it to fasten securely.
 - d. Connect the watertight connector end of the power cable (PC-23MM-20-ACC) to VT-776W and PWR1872D512-M12, then connect the yellow wire (ignition wire) to the vehicle ignition signal pin.



(2) Without the ignition ON/OFF function.

- d. Cut off the yellow wire (Ignition wire) on the power cord (PN: PC-03M-20-ACC);
- e. Connect the watertight connector end of the power cable (PC-03M-20-ACC) to the PWR1872D512-M12 power connector by aligning the connector pins to the power connector, push down on the watertight connector and twist it to fasten securely.
- f. Connect the watertight connector end of the power cable (PC-23MM-20) to VT-776W and PWR1872D512-M12.



Chapter5. Installation and FAQ

5.1 Installation

VT-776W is mainly used in the warehousing forklift, logistics, container trucks and so on. In order to adapt to its operating environment, there are a variety of mounting methods, including boom mounting, VESA mounting, wall mounting, etc.



5.2 FAQ

Q1:Does the on-board terminal support ACC ignition signal delay switch?

A:VT-776W car terminal optional ACC ignition signal intelligent switch machine functions. Under the function of the ACC mode, when the on-board computer off, if the detected signal when the ACC will automatic startup latency for 10 seconds, and car terminal in the boot state, if detected the ACC will delay 10/30/120 seconds after the automatic shutdown, without artificial operation in the process of the on-board computer; When ACC is selected, the power interface of the on-board terminal will be changed to 3Pin, positive pole, negative pole, ACC detection pole. Generally, positive and negative pole are connected to vehicle batteries, and ACC detection pole is connected to ignition signal.

Q2:Why is it necessary to add a DC-DC power adapter for the installation of forklifts, trailers, front cranes and stacker?

A:The car always has a peak value at startup. In order to avoid burning out the equipment power board, the power adapter of DC-DC is needed to stabilize the voltage. The current equipment installed power board supports the voltage of 8-36V Description:

For these battery models, there are three voltage output specifications, as follows:

- 1, trailer battery output voltage: 12V
- 2. Battery output voltage of front lifting and stacking machine: 24V
- 3. Forklift battery output voltage: 48V

Q3:What advantages does TNC have over SMA antenna interface?

A: TNC interface and feeder connection stability is better, not easy to loose and damage, TNC joint damage rate is low.



TNC interface

SMA interface

Q4:How to ensure the normal use of the VT-776W under the impact of high strength vibration?

A:1.VT-776W shell is made of strong aluminum alloy.

2.The VT-776W's built-in electronic modules offer excellent shock resistance, such as a gauge LCD screen and a shock-resistant solid-state drive (SSD), enabling the VT-776W to withstand harsh vibration.

5.3 Warranty and after service

Should this VT be malfunctioned, please contact your original retailer providing information about the product name, the serial number, and the details about the problem.



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