

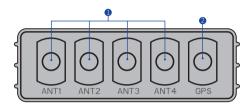
5G Ruggedized Dongle

Quick Start Guide

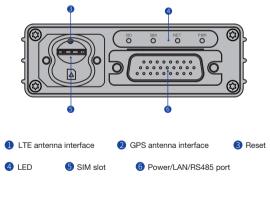
Introduction

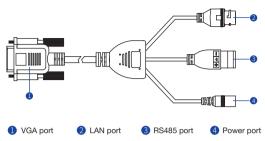
5G Ruggedized Dongle is designed for industrial applications that converts 5G wireless signals into Gigabit Ethernet, providing stable and high-speed 5G access for the devices. With an operating temperature range of -40°C ~ 70°C. IP65 dust and water proof endurance, it offers industrial-grade environmental gualifications while providing higher speed data services for video and other bandwidth-intensive applications.

Designed for both indoor and outdoor harsh industrial environments, 5G Ruggedized Dongle meets high standards in vibration tolerance and is ideal for operations in robot, AVG, AMR, unmanned delivery cars, drones, logistics, automated manufacturing, port and other outdoor applications. 5G Ruggedized Dongle can also offer precise information about its real-time location; its built-in GNSS receiver allows GPS, GLONASS, Beidou and Galileo constellations.



Device architecture





Cable definition

	DI/DO Cable Definition		
[000]	Number	Definition	
נססט	1	RS485_B	
()	2	RS485_GND	
i 2 3	3	RS485_A	

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Environmental specifications

Operating temperature	-40 °C ~ 70 °C
Storage temperature	-40°C ~ 85°C
Humidity	5% ~ 95%
Power supply	12VDC
Power consumption	< 24W
Water and dustproof	IP65

Packing list

Items	Accessories	Qty
1	VGA to Power/LAN/RS485 cable	1
2	Mounting kit U-clip bolt	1
3	U-card bolts	2
4	Ethernet cable	1
5	Ethernet port jacket	1
6	Power adapter	1
7	Rubber paddle antenna	4
8	Magnetic base for rubber paddle antenna	4
9	GPS antenna	1

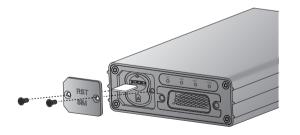
Hardware configuration

SIM card installation

1. Use a cross screwdriver to remove the SIM card cover:

2. Slide the SIM cards into the SIM slots until they click into place. When the dongle is powered on or rebooted, it automati cally connects to the network associated with the Primary SIM card;

3. Re-attach the cover.



Connect and turn on the dongle

1. First, make sure the VGA connector is plugged into the socket:

2. Tighten the nut to make sure it's assembled in place.



Antenna installation

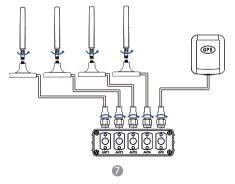
Antenna Accessories:

- · 4 Rubber Paddle Antennas
- · 4 Magnetic Bases for Rubber Paddle Antennas
- · 1 GPS Antenna

Instructions:

1. Attach each of the four rubber paddle antennas to the SMA bases of the corresponding magnetic bases for rubber paddle antennas:

- **2.** Screw the other end of the extension cable onto the corresponding ANT1/ANT2/ANT3/ANT4 SMA interface on the device:
- 3. Screw the GPS antenna onto the GPS SMA interface of the device.



LED behavior

When setting up the dongle unit, the LED will have the following behavior:

	Dor	ngle
PWR	Steady on	Power on
	Off	No power supply
NET	Steady on	Internet available
	Off	Internet unavailable
	Blinking (500ms interval)	Searching network
	Steady on	SIM ready
	Off	No SIM detected
SIG	Green	Signal strong
	Yellow	Signal good
	Red	Signal weak
	Off	No signal
	Blinking Green and Red (500ms interval)	Firmware upgrade

Software configuration

Login to the web management page

1. Launch the web browser, enter http://192.168.225.1 in the address bar, and press Enter:

ひ 命 ① https://192.168.225.1

2. Enter the username and password, and click Login; **3.** After the password is verified, you can login to the web management page.

Username	
Password	
Login	

The default username and password are both **admin**. If you want to view or configure the dongle, you should use the super account to login to the web management page. The default super username is **superadmin**, and the password is **admin**.

Radio settings

1. Connect to the donale correctly: 2. Go to the management website; **3.** Choose Advanced Settings \rightarrow Network \rightarrow Radio Settings.

Settings		
Status	Connected	
Connect Method	Auto 🗸	
		Save Cano
5G Status		

5G Status		
DL MCS	0	
UL MCS	25	
DL Frequency	2565.000MHz	
UL Frequency	2565.000MHz	
Band	41	
Bandwidth	100MHz	
RSRP0	-79dBm	
RSRP1	-79dBm	
RSSI	-41dBm	
RSRQ	-11dB	
SINR	24dB	
TX Power	11dBm	
PCI	993	
Cell ID	61	

The default setting is automatic connection and full band scanning, if you want to connect to the 5G/LTE network according to your needs, you can set the connection mode as manual, and simply scan a specific band.

FAOs

The POWER indicator does not turn on:

 Make sure that the power cable is connected properly and the dongle is powered on.

• Make sure that the power supply is compatible with the dongle.

Fails to Login the web management page:

- Make sure that the dongle is powered on.
- Verify that the dongle is correctly connected to the computer through a network cable.

• If the problem persists, please contact the authorized local service suppliers.

The dongle fails to search for the wireless network:

Check if the power supply is connected properly.

 Check if the dongle is placed in an open area that is far away from obstructions, such as concrete or wooden walls.

• If the problem persists, please contact the authorized local service suppliers.

The parameters are restored to default values:

 If the dongle is powered off unexpectedly while being configured, the parameters may be restored to the default settings.

• After configure the parameters, download the configuration file and restore the desired settings guickly.

The dongle does not support SIM card hot-plug, please confirm that the device is powered off when the SIM card is inserted or removed.