

Welcome to use Shuncom Smart Technology Co., Ltd. products, please read this manual before use.

1. Product Description:

SZ11-GW-3 is a kind of Internet of Things wireless communication gateway, which uses the public network wireless network + small wireless network to provide users with the function of eliminating the need of field wiring and wireless long-distance data transmission.

The product uses high-performance industrial 32-bit processor and industrial-grade wireless communication module, while providing a serial port (RS232 / RS485), four Ethernet LAN ports, an Ethernet WAN port, and supports WIFI AP / Repeater / STA, so it can be connected to serial devices, Ethernet devices and WIFI devices at the same time, which provides a perfect platform for IoT applications. It can be widely used in industries such as self-service terminal industry, smart grid, intelligent transportation, Automation, intelligent building, fire protection, environmental protection, smart medical treatment, smart lighting, smart agriculture and coal mines, oil and other occasions.

1.1 Function and features:

- Stable full Netcom speed experience, fully compatible with telecommunications, mobile, China Unicom's 2G, 3G, 4G network
- Cable network backup with each other to ensure the normal and stable

data transmission

- Support WIFI, 4G, Ethernet port access to the Internet, multi-network at the same time online.
- Powerful WIFI function, support AP, STA, Repeater multiple modes ,
- Interface rich, to meet the different needs of customers and applications, 4-way WAN port, 232 serial port, 485 serial port, USB and 4 AD / IO interface.
- A variety of wireless extensions, optional ZIGBEE, LORA, Bluetooth
- Multi-network intelligent switching backup, data off network storage resume
- Protocol rich, support for transparent transmission, MODBUS RTU switch TCP, MQTT.
- Support for polling MODBUS devices proactively, helping customers save on cumbersome SCADA Modbus commands
- Using industrial-grade high-speed 4G wireless communication module, configured 32-bit high-end processor, front-end acquisition of information transmission more real-time and higher speed.
- Downstream reservation optional a variety of wireless communications, ZIGBEE, lora, Bluetooth, etc., more flexible use
- Industrial Design, Metal Case, Stable 7X24 Hours Uninterrupted Work Under Various Industrial Environments & Strong Interference.

1.2 Product specifications

Specification name	Specification Description	Remarks
product model	SZ10-GW-3	Multi-function gateway
Network standard	4G	According to user needs optional support / not support, 4G for the whole network module
interface	Antenna interface	4G Antenna interface: SMA-K Female head
		Wi-Fi Antenna interface: SMA-K Female head
		Zigbee Antenna interface: SMA-K Female head
	button	Support RESET button (reset)
	Ethernet interface	1 X WAN 10/100Mbps Adaptive Ethernet port
		4 X LAN 10/100Mbps Adaptive Ethernet port
	AD/IO □	Support 4 road AD / IO acquisition (according to user needs to choose different functions, optional 0-5V, 4-20MA, switch acquisition, high and low level acquisition, high and low level output)
	COM □	1 Road RS485 / 1 Road RS232
Power supply	Power supply range	9-24V DC(24W)
Working power consumption	Working Average current	About 320mA@12VDC
Note: The size of communication power consumption affected by the network signal		

strength and network module model.		
other	Dimension	Length × width × height (mm) 147×58.5×147
	Working temperature	-20~+65 ℃
	Storage temperature	-40~+85 ℃
	Relative humidity	≤95% (No condensation)
4G	working frequency	FDD LTE : B1/B3 TDD LTE : B38/B39/B40/B41 TDSCDMA : B34/B39 CDMA2000 1x/EVDO : BC0 GSM : 900/1800MHz
	Transmission rate	LTE-FDD : Max 100Mbps(DL) Max 50Mbps(UL) LTE-TDD : Max 61Mbps(DL) Max 18Mbps(UL) SCDMA-TD : Max 4.2Mbps(DL) Max 2.2Mbps(UL) CDMA : Max 5.4Mbps(DL) Max 14.7Mbps(UL) GPRS : Max 85.6Kbps(DL) Max 85.6Kbps(UL)
	Transmit power	FDD LTE : 23dbm±2db TDD LTE : 23dbm±2db TDSCDMA : 24dbm +1/-3db

		GSM 900Mhz : 33dbm \pm 2dbm GSM 1800Mhz : 30dbm \pm 2dbm
	Receiving sensitivity	FDD B1: -97dBm(20M) FDD B3: -96dBm(20M) TDD B38: -94dBm(20M) TDD B39: -94dBm(20M) TDD B40: -94dBm(20M) TDD B41: -93.5dBm(20M) TDSCDMA B34: -110dbm TDSCDMA B39: -110dbm CDMA BC0: -108dbm GSM 900: -110dBm GSM 1800: -109dBm
WiFi	Standard and frequency band	Support IEEE802.11b/g/n standard
	Theoretical bandwidth	UP TO 300Mbps
	Transmit power	20dbm
Zigbee	Wireless frequency	2400-2485M 2.4G ISM Free band
	Wireless speed	Fixed 250K
	Transmit power	20dbm
	Receiving sensitivity	-104dbm
System	CPU	32-bit
	FLASH	128M
	DDR2	128M

2. Product appearance and interface

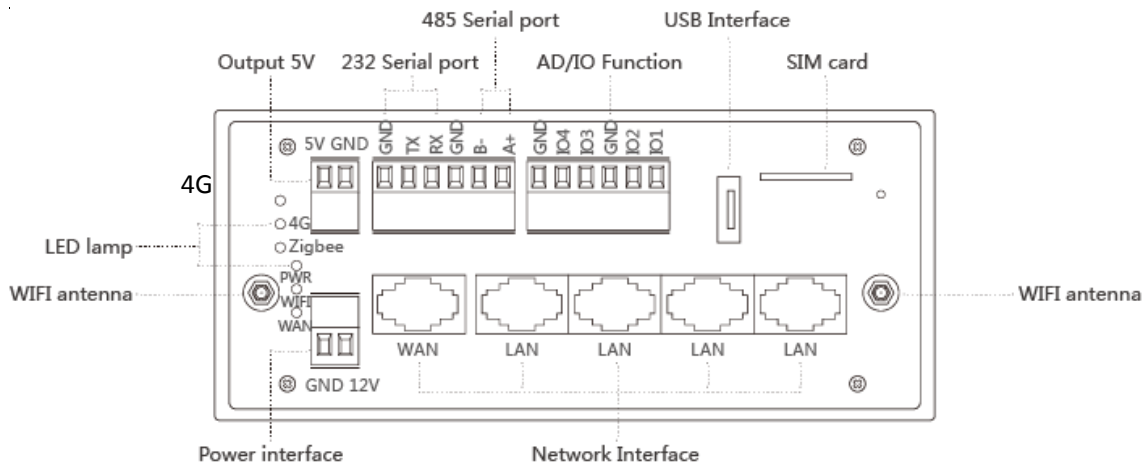
2.1 Product image



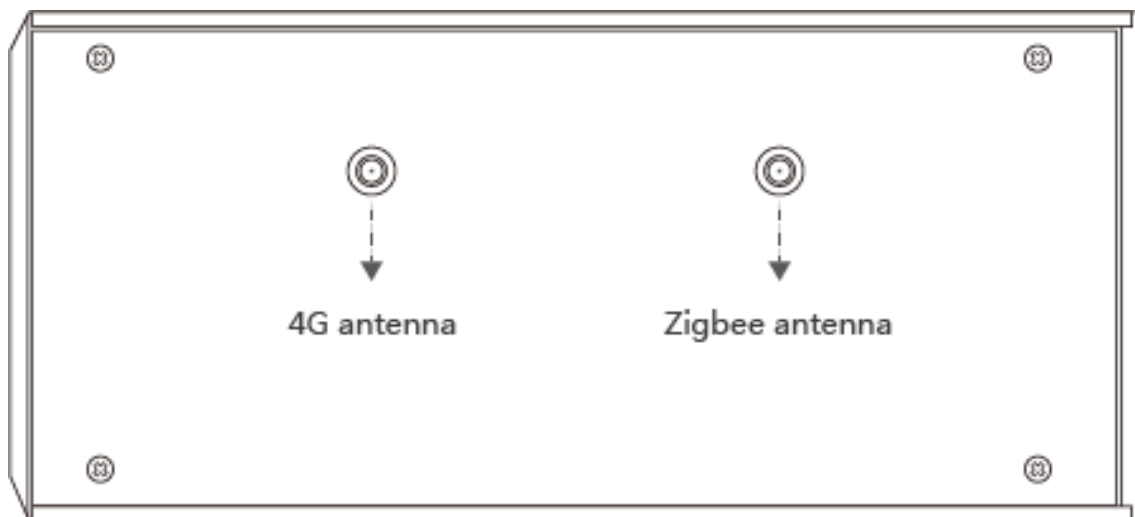
147mm*58.5mm*147mm

2.2 Interface and light instructions

1) Front panel interface introduction :



2) Top panel interface introduction



3) LED Indicator light description

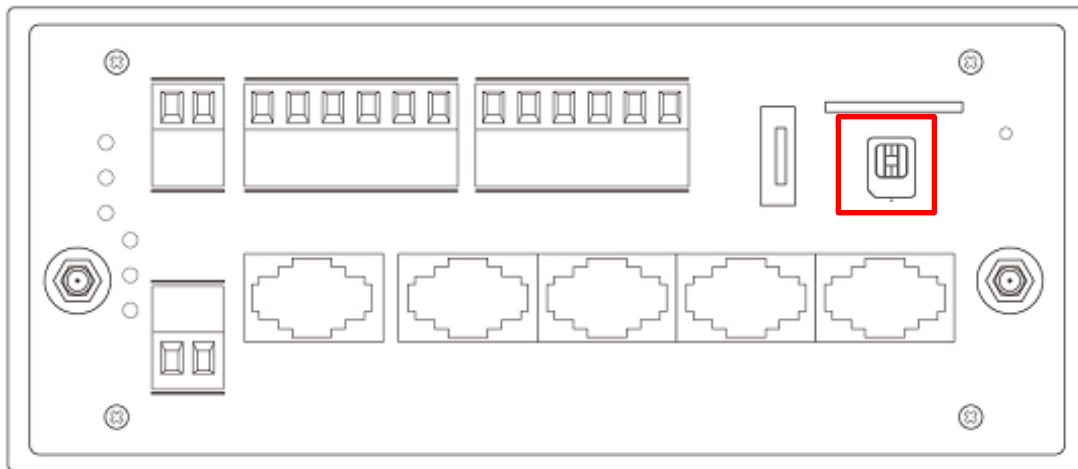
Indicator light	on	off	Blinking
PWR	On after power on	Missed power	/
WIFI	Network connected (no data)	WIFI have not started	Network connected (with data)
WAN	Network connected (no data)	WAN port Missed	Network connected (with data)
ZIGBEE	/	No Zigbee	normal work

		function	
4G	/	No 4G	1S Slow flashing interval (not connected) Flash connected

3. Equipment assembly

3.1、Accessories inspection

After unpacking please check the equipment for any deformation or other damage, if not correct, please contact the equipment supplier in time. Box with packing list, please follow up check list of equipment is complete.



3.2 SIM card installation and connection

- The device uses a MicroSIM card, insert the SIM card into the card slot according to the direction of the picture (requires Card needles top SIM Card to confirm the SIM card inserted correctly), if you need to replace the SIM card, please turn off the power to prevent the SIM card from damage.
- Put WIFI, 4G and other wireless antennas properly connected.

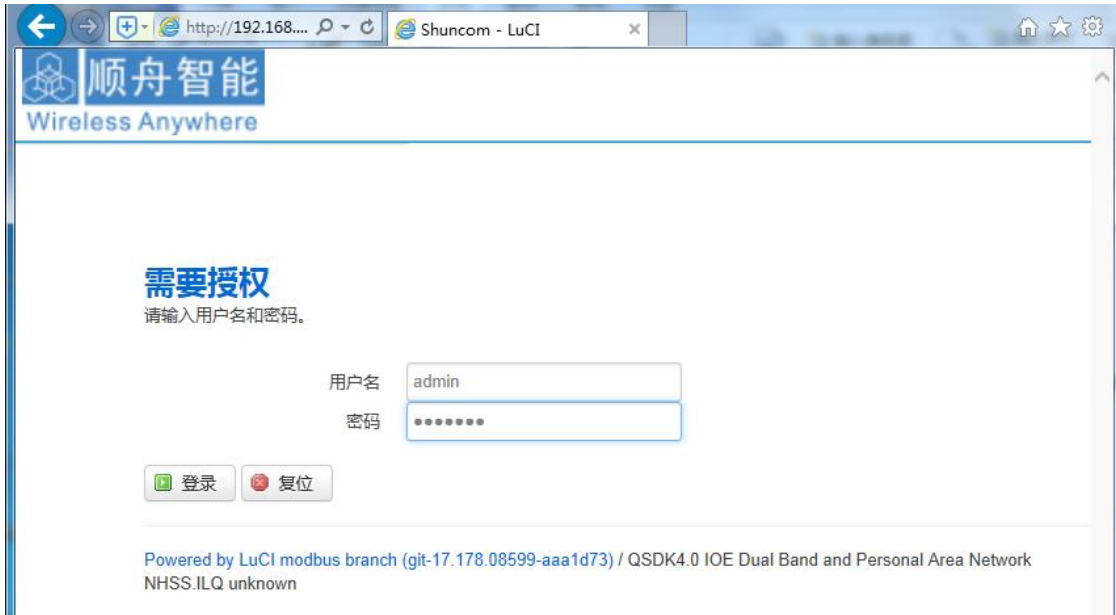
- LAN port connect computer or industrial network port equipment, serial port connect industrial serial devices, WAN port connect switch and other network equipment.
- The router connected to the power supply, recommended DC12V 2A power.
- COM connection: 485 A + B-, and customer 485 interface A, B feet orthogonal connection. 232 interface, RX, TX, GND, and customer 232 serial port RX, TX anti-cross connection, GND direct connection.

4. Equipment use

1. Power on the device

2. Device LAN port connect the computer, PC login 192.168.6.1 in the browser, login password: shuncom, after logging in , can to do the relevant configuration for gateway.

Shuncomgw can also use computer to connect gateway configuration through the WIFI wireless. Device WIFI factory default AP mode, SSID is SHUNCOM - ***** (asterisk is 3 bytes after MAC), the default password: shuncomgw.



3. Device networking

Such as the use of wired Internet access, direct Internet access WAN port.

After connecting can check the status or make advanced settings in "Network - Interface - WAN".



Such as the use of 4G Internet access, the SIM card will be inserted correctly the gateway to achieve network connectivity. If can not access the

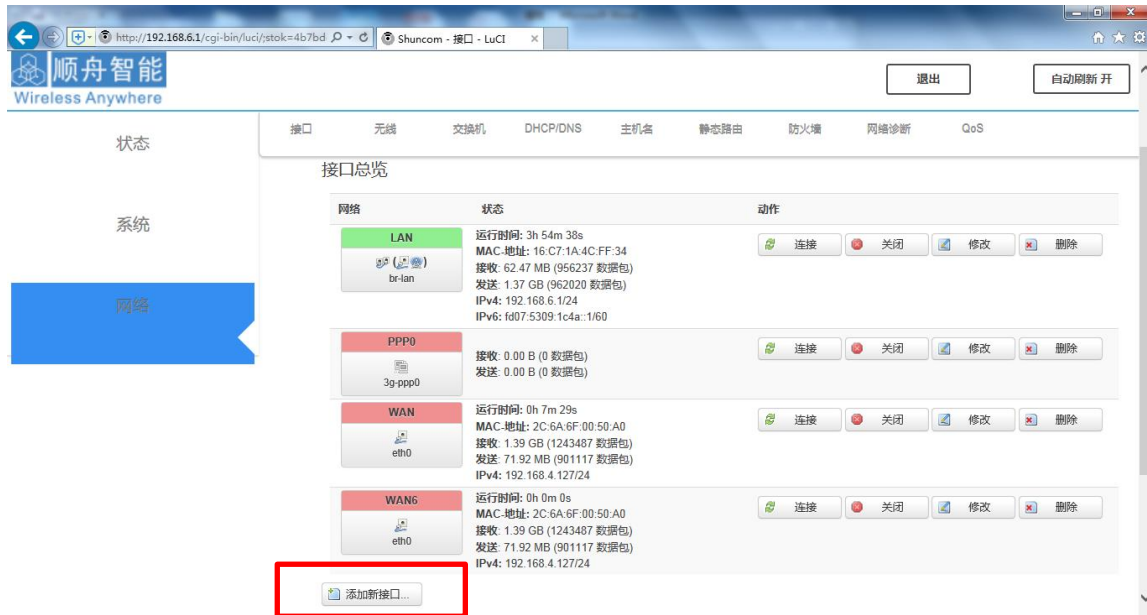
Internet, check the parameters in "Network - Interface - PPP0", set the modem node to "/dev/ttyUSB5".



After connected , "network - Interface - PPP0" will start timing "running time", and statistics traffic. can also check network connection status in "Network - Interface Overview" and "Status - Overview".

If you need to access the wireless access point on the site through the gateway's WIFI ,need the gateway do STA to connect wireless router access the Internet. The specific settings are as follows

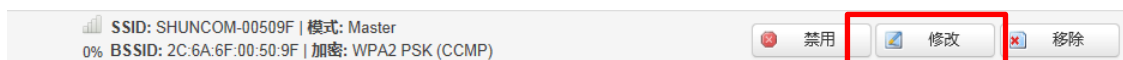
1) Add STA network interface in "Network - Interface" (if have, no need add)

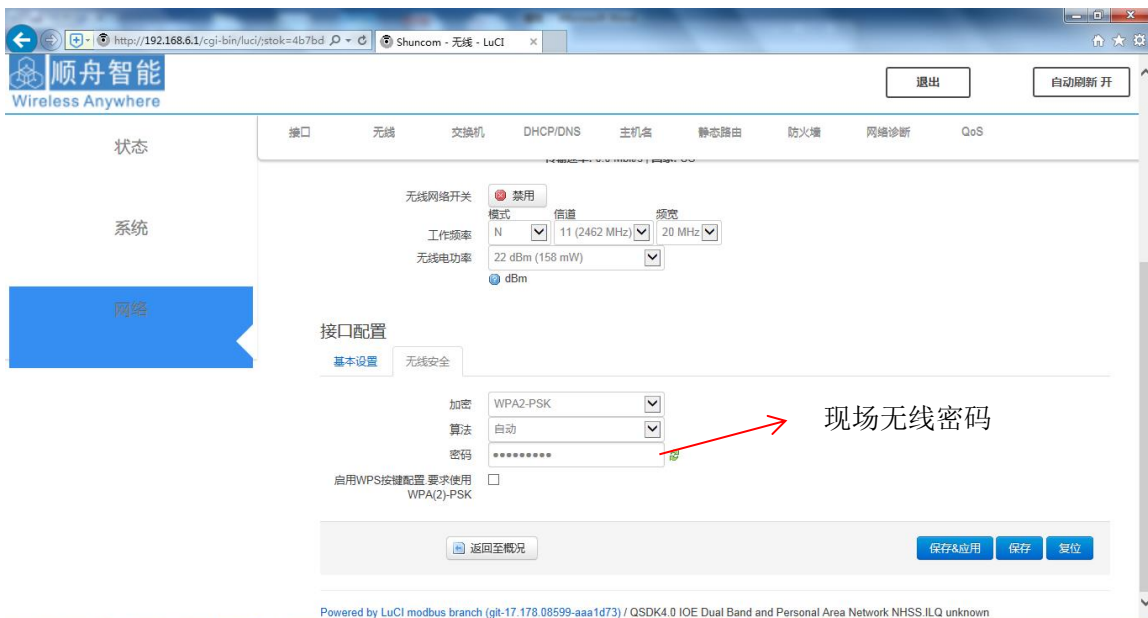


After setting the parameters, click Submit

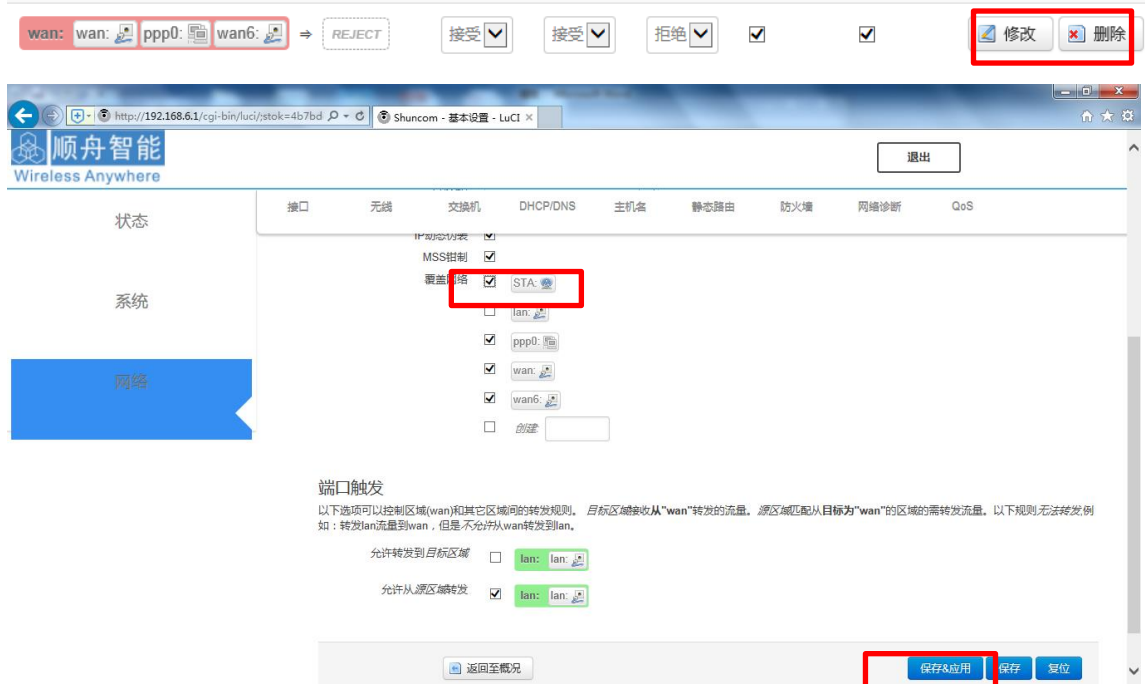


Then modify the "network - wireless" wireless parameters, fill SSID name, password






Finally in the "Network - Firewall" add new interface to the group to achieve the internet.



4. Interface protocol settings

Through the "system-SHUNCOM" do serial protocol settings, default product with "Zigbee" and "485/232" 2 interfaces. Factory default are transparent. Click  after changing the parameters



device:: szTT_device4_4 (Zigbee Downlink transparent transmission,
With the Shuncom version 4.4 transparent program to use)

szTT_uart (Downlink transparent transmission, Zigbee selected
the agreement with any Zigbee firmware to achieve transparent
transmission, but can not set Zigbee)

server: szTT_cloud (Uplink transparent transmission)

szmqtt2puao (MQTT protocol)

parameter: target address example: 192.168.1.100 12345


Configuration: Configure the Zigbee module or 485/232 serial port
parameters (Zigbee main parameters of "wireless frequency"
"network ID", the main parameters of the serial port is baud rate, data
bits, parity)

device: Add instructions to Active driving, The instruction is HEX format,
Polling interval unit

透传数据

szTT_device4_4_2

尚无任何配置

id	data	删除
1	02040000000131f9	 删除

添加定时透传数据

添加  添加

轮发间隔 1000 

修改  修改

5. Support and maintenance

1. Please read this manual before use.
2. the device is not sealed, when in use to ensure that the device will not be wet or damaged.
3. keep the equipment ventilated and dry, keep the equipment away from heat, dust and strong magnetic field.
4. replacement of equipment accessories and SIM, have to power off operation.
5. Ensure the insulation of equipment and surrounding Touch objects around, can't let charged objects contact the equipment
6. Do not open or disassemble the device without permission, except under the guidance of our technicians.