



NJ-IOT-560

Product use manual of Smart cloud box--smart lamp pole

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I. Product brief introduction

1. Product brief description

NJ-IOT-560 is the fifth generation of intelligent street lamp network independently developed and produced by adding new energy technology Guan, is a remote intelligent end users remote control remote central control device, on based on the generation of upgrades, embedded 4Gcat.1 single light controller, one-click alarm, IP broadcast module, compared to the previous generation, the cost is greatly reduced, the signal is more stable, high integration, reserved more power can interface, can access more sensors and equipment, using 4G network, optical fiber communication, Ethernet Network and WIFI networks provide users with long-distance big data transmission function, connect to the cloud, and control the power supply and transmission out, strong edge computing power, reserved interface, for secondary development, more powerful functions to provide a stable support.

The product integrates a 2.4 GHz IEEE 802.11b/g/n WI-FI transceiver and comes with Mediatek MT7621AT's dual-core 880MHz

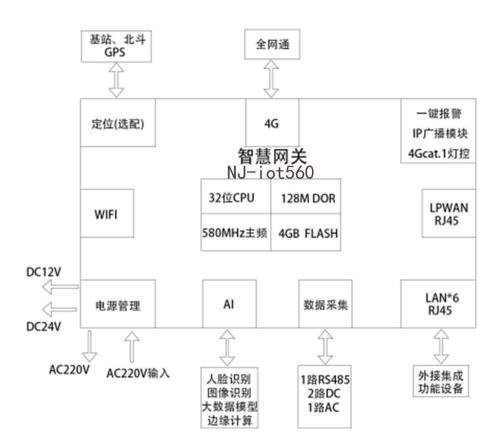


CPU, 4GB EMMC flash memory, 4 high-speed Ethernet ports layer (Ethernet PHY), HNAT memory accelerator, and multiple common inputs and input outputs (I/O), Linux (Ubuntu14.04) is the software support platform, with 1 * RS485 interface and 8 ethers Network LAN, 1 Ethernet WAN and 2 WIFI interfaces, 2 gigabit fiber ports, 1 AC220V Output, 1 one-button alarm interface, 1 IP sound column interface, 1 DIM output, can be connected at the same time a variety of Ethernet devices, serial port devices, WIFI, devices, etc., to realize transparent data transmission and routing functions.

The NJ-IOT-560 is designed to fully consider the versatility and stability, based on the Internet of Things technology architecture it can meet the data collection and intelligent control of intelligent terminal devices, and have a certain degree of expansion exhibition, convenient in the existing hardware to achieve new equipment under the access.



2. Product framework



3. Product function

- Built-in 4Gcat.1 single-light controller, equipment online rate up to
 99.99%, stability, reliability is greatly improved.
- Integrated one-button alarm module, without debugging, plug and play, greatly save the labor cost.
- Built-in IP broadcast module, universal interface, stable and reliable, low cost.



- Support WIFI, 4G, gigabit network port, gigabit optical fiber port access in various ways to access Ethernet.
- Equipped with 2-way optical fiber interface, with two-layer networking capability, suitable for ring, interactive chain networking scenarios,
- Increase the number of network ports by increasing switching communication components in the case of insufficient network ports.
- Support three netcom, compatible with telecom, mobile, Unicom 2G
 \ 3G \ 4G network.
- Support Micro sim card, using anti-line drop mechanism.
- Wired and wireless backup each other to ensure normal and stable transmission of data, intelligently switch network backup, store the data offline in the case of network disconnection, and wait for the network to resume the data transmission.
- Powerful WIFI function, support AP, STA, Repeater, multiple modes free switching.
- Protocols are rich, easy to connect, transparent data transmission,
 MODBUS RTU to TCP / IP, MQTT.
- Support active polling of different address segment MODBUS devices to make operation easier.



- Using the industrial-grade high-speed 4G wireless communication module, configured with a 32-bit high-sex processor, the front-end of the information collected is more timeliness and accurate.
- Industrial design, aluminum alloy shell, facing a variety of outdoor environment, industrial environment and strong interference, can be stable 7X24 hours uninterrupted work.

4. Technical parameter

specifications	parameter	remarks
model	NJ-iot560	Gateway (Smart Light)
Single lamp controller	4Gcat.1	Built-in single-light controller
The IP broadcast module	40W	Built-in IP broadcast module
One key alarm	TCP/IP DHCP	Built-in one-click alarm
sensor	Temperature sensor, humidity sensor	built-in
	Route 1 WAN mouth	10 / 100 / 1000 Adaptive
Network system	4G	4G / 3G / 2G full netcom
	No.2 fiber port	Support ring network

power input	scope	110~265V/30A
Classification of waterproof	IP65	IP65
size	Length, width and height (mm)	295mm*118mm*80mm
	Storage temperature-40°C	Storage temperature-40℃ ~85℃
	~85℃	Operating temperature-25℃ ~70℃
temperature	Operating temperature-25°C ~70°C	
	service frequency	FDD LTE: B1/B3 TDD LTE: B38/B39/B40/B41 TDSCDMA: B34/B39 CDMA2000 1x/EVDO: BC0 GSM: 900/1800MHz
4G	transmission speed	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)
	FDD LTE: 23dbm±2db TDD LTE: 23dbm±2db
transmitting power	TDSCDMA : 24dbm +1/-3db GSM
	900Mhz: 33dbm±2dbm GSM
	1800Mhz: 30dbm±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
frequency range	Support for the IEEE802.11b/g/n's
tape width	Up to 300Mbps

WIFI	power	20dbm
	Processor, CPU	Marvell 88F3720 ARM A53 Dual-core 1Ghz
system	internal storage	1GB
	Flash Memory FLASH	4GB EMMC

II. Product appearance and interface

1. Product appearance







Note: The product picture in the manual is only number, type and

location, please refer to the actual model.

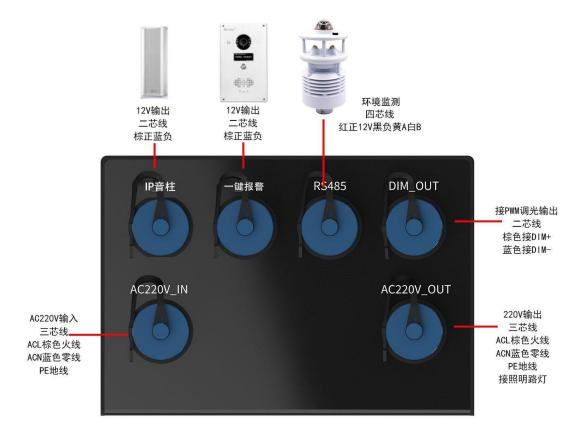
2. Product interface

joggle	explain
1-Way of AC220V input	AC220V power supply (110~265V)
1-way One-key alarm interface	
1-way IP column interface	
The 1-way AC220V output is available	Provide 220V output to the corresponding equipment; remote control switch and current detection
1 RJ45WAN	Outnet entrance, 10 / 100 / 1000Mbps adaptive
8 RJ45LAN	Communication network, 10 / 100 / 1000Mbps adaptive
The 4-way antenna interface	4G Full netcom SMA sucker antenna, WIFI antenna, GPS antenna
Two-road gigabit optical fiber ports	1 Into 1 out, support single-mode, multi-mode optical fiber, support ring type, chain type and other network topology
1-Route RS485 interface	Access to a device with a 485 interface
The 1-way DIM interface	The single-light controller controls the light brightness



3. Product wiring







III. Product group matching

1. Product accessories

Accessories name	quantity
NJ-IOT-560 Smart Cloud Box	1
4G suction dish antenna	2
WIFI Antenna (IPEX)	2
Two core line	3
Three core line	2
four-core wire	1





IV. Notes and technical support

1. Notes

Please read this product manual before use. If you have any questions, please consult our company engineers for technical support. When using the equipment, the principle must be strong magnetic field and keep the insulation state with other objects. When installing and replacing the SIM card, it must be off before operation.

Smart cloud box wiring attention



2. Technical support



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