Product Datasheet

WQ300M5803

5.8GHz outdoor long-distance transmission network bridge

1、PRODUCT OVERVIEW AND FEATURES

Product overview:

WQ300M5803 is a 5G_11AN high-performance, high-speed outdoor long-distance wireless bridge. It has the characteristics of long transmission distance, strong penetration ability, and strong anti-interference ability. It supports a transmission distance of 3 kilometers and a wireless transmission rate of 300Mbps. It is suitable for wireless transmission of monitoring projects in outdoor scenic spots, ports, oil fields, construction sites, etc.

Product features:

- Qualcomm AR9342 CPU solution greatly improves the data processing performance of the product
- 8M flash memory + 64M high-speed memory
- 5.8GHz frequency band, the no-interference signal is continuously stable
- 300MbpsSupport intelligent channel analysis, automatic optimal channel selection, the maximum rate of 300Mbps
- 14 dBi directional antenna, can achieve point-to-point, point-to-point outdoor coverage and application
- 3 km long-distance HD stable transmission
- Digital display, fast set the IP address and channel
- Support 24 V PoE and DC 12V power supply modes
- 6KV lightning protection
- IP65 protection grade, sunscreen, waterproof and antifreeze

- Comply with IEEE802.11a/n standard
- Outdoor installation is convenient, easy to dismantle and easy to use

Product superiority:

3 km for long-distance transmission

WQ300M5803 adopts Qualcomm chip scheme with stable and reliable performance. At the same time, it is equipped with PA power amplifier and LNA low-noise amplifier, and the test transmission distance can reach about 3 kilometers in an open environment, which is suitable for the application of long-distance monitoring and transmission.

5.8GHz anti-interference

The 2.4GHz frequency band has more interference, which is prone to the problem of signal congestion. WQ300M5803 works in the 5.8GHz frequency band, with the characteristics of stable operation, high transmission rate, high reception sensitivity, long coverage distance, and adaptation to various environments.

Built-in large-area gain antenna

WQ300M5803 has a built-in large area directional antenna, the maximum gain of 14 dBi, to ensure the bridge transmission picture quality high definition, no delay, no lag, users easily do the project.

6KV lightning protection

Built-in 6KV lightning protection circuit, with a stronger lightning protection and surge protection.

High-performance, large memory, and large throughput

Using Qualcomm AR9342CPU solution, 8M flash memory + 64M high-speed memory, greatly improve the data processing performance of the product

2、TECHNICAL SPECIFICATION

Specification Parameters	
Model	WQ300M5803
CPU	AR9342
Flash	8MB
DDR	64MB
5G Working frequency band	5.150GHz～5.850GHz
5G WIFI transmission protocol	802.11 a / n
Top Speed	300Mbps
Antenna	Plate directional antenna gain: 14 dBi
Maximum wireless access support	50+
Transmitting power	< 21dBm
Interface (WAN)	1×10 / 100M adaptive WAN / LAN port with 24 V PoE power supply
DC	12V ⎓ 1A
PoE	24V ⎓ 0.5A
Nixie light	1, can show 0-9 A-F total 16 species

Digital buttons	1, short press, can change the digital tube display, quickly set the IP address and channel (Note: press 5 seconds to restore factory default)
Dial switch	1×2-bit dial switch, can be fast and convenient configuration bridge mode
Status indicator light	Power power indicator, LAN port indicator, two RSSI0 RSSI1 signal lights
ESD test-I	Contact discharge ± 6KV and air discharge ± 15KV
The Surge Test-I	Poor touch: ± 2KV
maximum power dissipation	< 8W
levels of protection	IP65
Dimension (L*W*H)	202mm*78mm*56mm
Net /Gross Weight	<0.23kg*2 / <0.62kg
Work environment	Normal operating temperature: -30 C to 55 C; Extreme operating temperature: -40 C to 70 C; Storage temperature: -40 C to 70 C; Humidity: 5%~95% (no condensation)

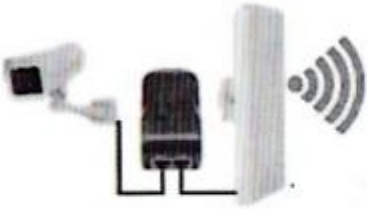
3、SOFTWARE FUNCTION

Basic Settings	Wireless working mode: AP Client Bridge AP Router
	WDS pattern
	Search SSID
	Lock the AP terminal MAC
	Country code
	802.11a/n pattern
	Channel bandwidth ： 5/8/10/20/25/30MHZ,Auto 20/40MHZ
	Output power control
	Wireless security: WPA-AES, WPA 2-AES encryption
Advanced setup	RTS threshold
	Automatically adjust the transmission distance
	polymerization
	Multibroadcast data
	Install the EIRP control
	Accept the door limit
	TDMA set up

	Select Chains
Network mode	Bridge router SOHO Router
Configuration mode	Simple advanced
Management Settings	Management interface: BRIDGE0
	Management IP address: DHCP static
	IP address, subnet mask gateway IP master DNS IP alternate DNS IP automatic IP alias
Interface	Bridge 0 MTU set up
	LAN0 MTU set up
	WLAN0 MTU set up
IP alias	The IP address of the Bbridg0, add and comment of the subnet masks
VLAN Set up	Adding and commenting VLAN IDs of LAN0 and WLAN0
QOS	Bandwidth start
Service	Ping watchdog
	SNMP agent
	NTP client
	System log
Change password	Modify the device login password Support for multiple languages: Chinese English Cesky Deutsch Francais Lietuviskai Polski Portugues
Firmware upgrade	Software updates are available on the WEB page
Equipment restart	Device restart can be performed on the WEB page
Configuration management	Backup the configuration, and upload the configuration to restore the factory settings
	Close: The Ethernet port connection is disconnected
	Light on: Ethernet connection is normal, two RSSI0 RSSI1 signal intensity indicators (client mode)
	Client: the two signal lights are always on, the pair is successfully connected, the two lights are shining, the AP terminal is scanning, the state is not connected, the AP terminal will always be on.

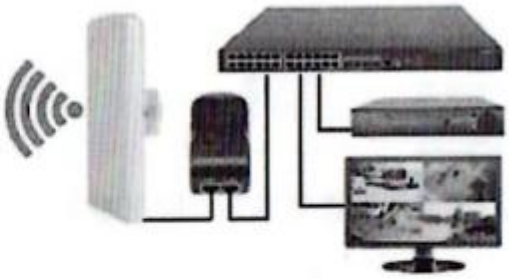
4、APPLICATION

1、A Schematic diagram of the point-to-point connection：



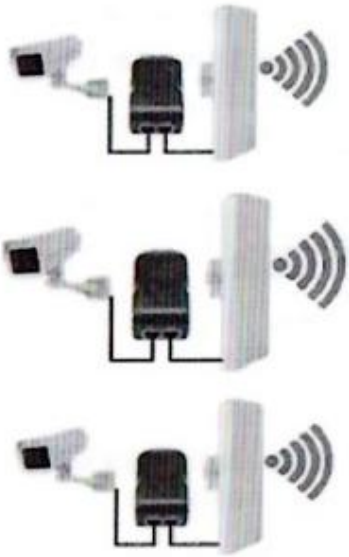
Bridge connects to the POE port of the power supply

Camera connects to the LAN port of the power supply



Bridge connects to the POE port of the power supply,the LAN port of the power supply connects to the Switch or NVR

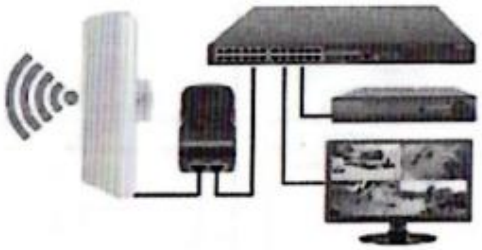
2、Schematic of point-to-multiple connections：



Bridge connects to the POE port of the power supply

Camera connects to the LAN port of the power supply

Launch angle 60°



Bridge connects to the POE port of the power supply,the LAN port of the power supply connects to the Switch or NVR

5、CONTACT US

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