



simpler, smarter, and more efficient

Make enterprise material management



specification

KEY CABINET PRODUCT SPECIFICATION

2.4G Wireless Communication Gateway: ZSL-PT20



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1. Product Image



2、Product Overview

With the widespread adoption of the Internet of Things, Bluetooth gateways are increasingly used to control the audio and visual functions of Bluetooth tags, particularly in applications such as parcel tracking by Cainiao, warehouse item retrieval, medication searches in pharmacies, and experimental sample identification. However, the high density of Bluetooth tags often leads to conflicts and slow search speeds, making these solutions inadequate for practical needs. There is now a growing demand for rapid control of audio and visual functions across large numbers of tags. Committed to meeting customer requirements, our company has developed the ZSL-PT20 2.4G gateway with universal bidirectional data functionality, which works seamlessly with our proprietary 2.4G tags and effectively addresses scenarios requiring rapid object location within large quantities of items.

The ZSL-PT20 (2.4G) gateway supports data transmission via RJ45 ports or WiFi, with power supply options including external power sources (9 – 24 V input) or POE. Its communication with 2.4G tags employs a proprietary 2.4G encrypted protocol developed in-house, ensuring robust security.

III. Indicator Light Status

- Green light: Power indicator
- Blue light: 2.4G wireless communication indicator
- Yellow Light: Device operation indicator

IV. Specifications and Parameters

model	2.4G Wireless Communication Gateway	ZSL-PT20
specifications	size	170*170*22mm
	net weight	Approximately 238.6 g
	pigment	white
	Shell Material	ABS
communication mode	Wired Interface	RJ45 Network Port
	radio interface	WIFI wireless
transport protocol	Alibaba Cloud IoT Protocol	MQTT protocol
2.4G Wireless	protocol	AES Encryption Private
	communication distance	20–50 m (depending on environmental conditions)
source	External power supply: 9–24 V	100mA@9V
	POE supply electricity	20mA@48V
power dissipation	Working Current	100mA@9V
way to install	Ceiling-mounted	Ceiling-mounted

	installation	
environment	working temperature	-20°C ~ 60°C
	Storage Temperature	0°C ~ 45°C
	Working Humidity	10% ~ 90%

V. Web Management Interface

1. Each gateway comes with a built-in Wi-Fi interface for configuring parameters, formatted as "XMINNOV_Gateway MAC Address" (as shown in the box below). Select this Wi-Fi interface to connect to the "XMINNOV_30EB1F3DE6CA".

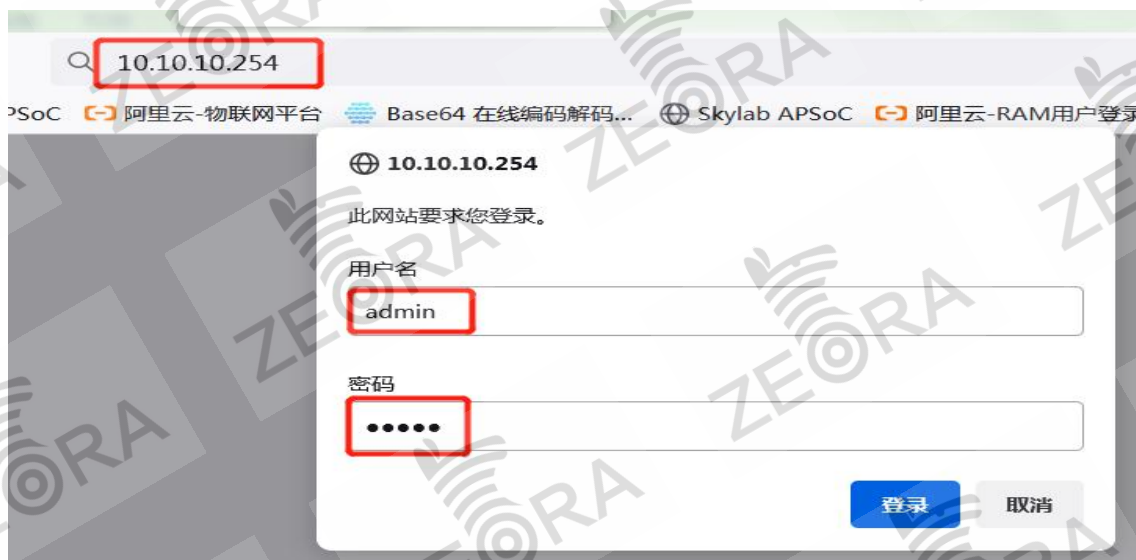


2. After connecting your computer to the gateway's Wi-Fi, disconnect the wired connection. The default LAN IP address for the gateway is 10.10.10.254. Open a browser, enter the gateway's IP address (10.10.10.254), and enter username: admin and password: admin.

Note: The gateway was previously configured to connect to a router,

obtaining DHCP settings from the router to access the internet.

To access the backend, connect your laptop or phone to the hotspot provided by the gateway and enter 10.10.10.254 to access it!



3. The management interface after logging in to 10.10.10.254 is shown below.

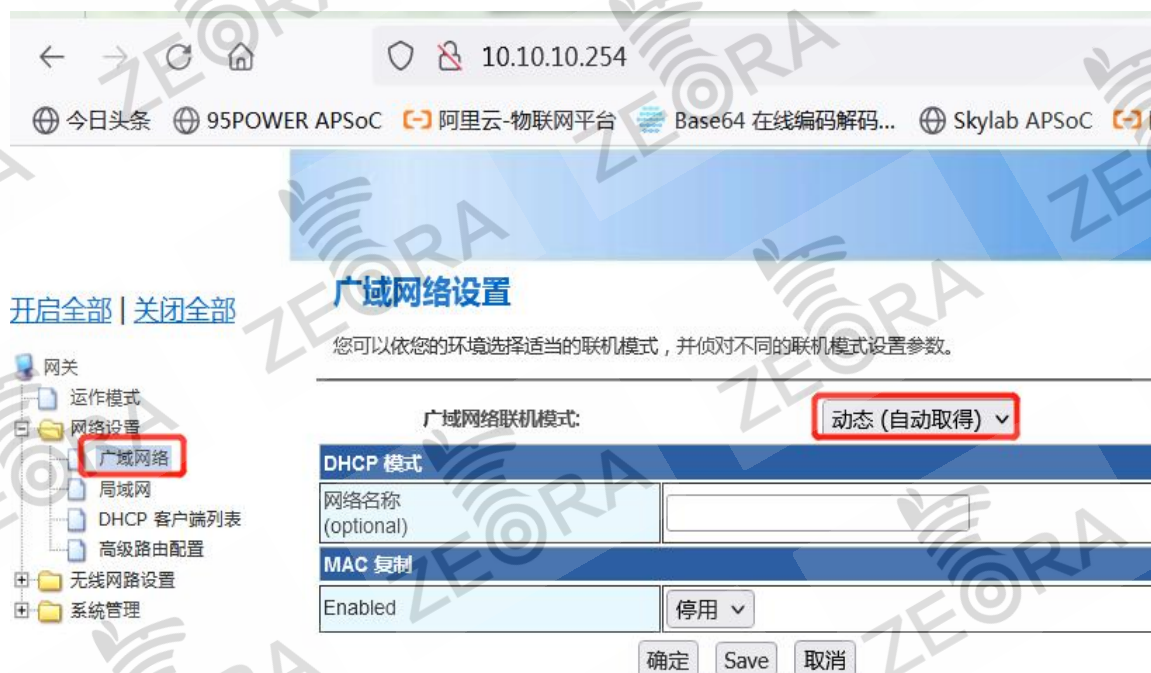


VI. Gateway Distribution Network

1. The gateway defaults to a RJ45 wired network connection, with its

网址: www.zebrastation.cn 电话: 020-3999 6976 邮箱: guoyuhao@ibanma.net Website:
www.zebrastation.cn Phone: 020-3999 6976 Email: guoyuhao@ibanma.net
Address: Room 1401, Building 16, Tianan Headquarters Center, No.555 North Panyu Avenue,
Donghuan Street, Panyu District, Guangzhou City

IP address dynamically assigned. Under normal conditions, simply plug the network cable into a DHCP-enabled network to automatically connect to Alibaba Cloud servers, as shown in the figure below.



2. If the gateway still cannot connect to the internet even after being connected to a wired network, configure its IP address to static mode by navigating to the Gateway Web Management Interface and following these steps: Network Settings → WAN → Static (Fixed IP).

For IP address, subnet mask, router IP, and DNS server fields, consult your on-site network administrator and enter the corresponding values. Click the "OK" button and then check if the network is functioning properly.



If the connection still doesn't work, try:

(1) Open the CMD window on your computer and use the ping command to check whether the local gateway connection is functioning properly.

(2) Check whether the computer network is functioning properly for internet access;

(3) Finally, if all functions operate normally, please contact the manufacturer's after-sales service if you encounter any issues.

Note: When configuring the network, set the gateway's DHCP type to "Server" rather than "Disabled"; otherwise, the gateway configuration interface will not open again. Configuration is shown in the figure below.

开启全部 | 关闭全部

网络

- 运作模式
- 网络设置
 - 广域网
 - 局域网**
 - DHCP 客户端列表
 - 高级路由配置
- 无线网络设置
 - 基本设置
 - 高级设置
 - 安全设置
 - WPS
 - 客户端列表
- 系统管理
 - 管理
 - 上传固件
 - 设置管理
 - 状态
 - 统计资料

局域网设置

您可以启用/停止以及设置所有的网络功能。

网络名称	Mediatek
IP 地址	10.10.10.254
子网络遮罩	255.255.255.0
局域网 2	☐ 启用 ☒ 停用
局域网 2 IP 地址	
局域网 2 子网络遮罩	
MAC 地址	30:EB:1F:3E:05:F3
DHCP 类型	服务器
起始 IP 地址	停用
结束 IP 地址	服务器
子网络遮罩	255.255.255.0
惯用 DNS 服务器	168.95.1.1
其他 DNS 服务器	8.8.8.8
预设信关	10.10.10.254
释放时间	86400

VII. RJ45 Network Connection

The gateway defaults to a RJ45 wired network connection; this setting is not required for factory-installed devices. To connect via the network port, follow these steps:

After entering the Gateway Web Management Interface, click "Operation Mode", select "Gateway", and click "OK".

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 - 管理
 - 上传固件
 - 设置管理
 - 状态
 - 统计资料

运作模式设置

您可以在此处设置适合您网络环境的运作模式

☐ Bridge: 所有以太网网络埠、以及无线网络界面，皆被串连到单一的桥接器界面。

☒ **Gateway:** 第一个以太网网络埠视为广域网网络端。其他的以太网网络埠、以及无线网络界面，则串连到单一的桥接器界面，并视为局域网端。

☐ AP Client: 无线网络界面的客户端视为广域网网络端。无线网络界面的基地台端、以及所有以太网网络埠，则串连到单一的桥接器界面，并视为广域网网络端。

启用 NAT

TCP Timeout:

UDP Timeout:

After configuration, refer to the "Gateway Configuration" section to connect to the network.

8. WIFI Connection

If the gateway needs to connect via Wi-Fi, follow these steps:

1. After entering the Gateway Web Management Interface, click "Operation Mode", select "AP Client", and click "OK".

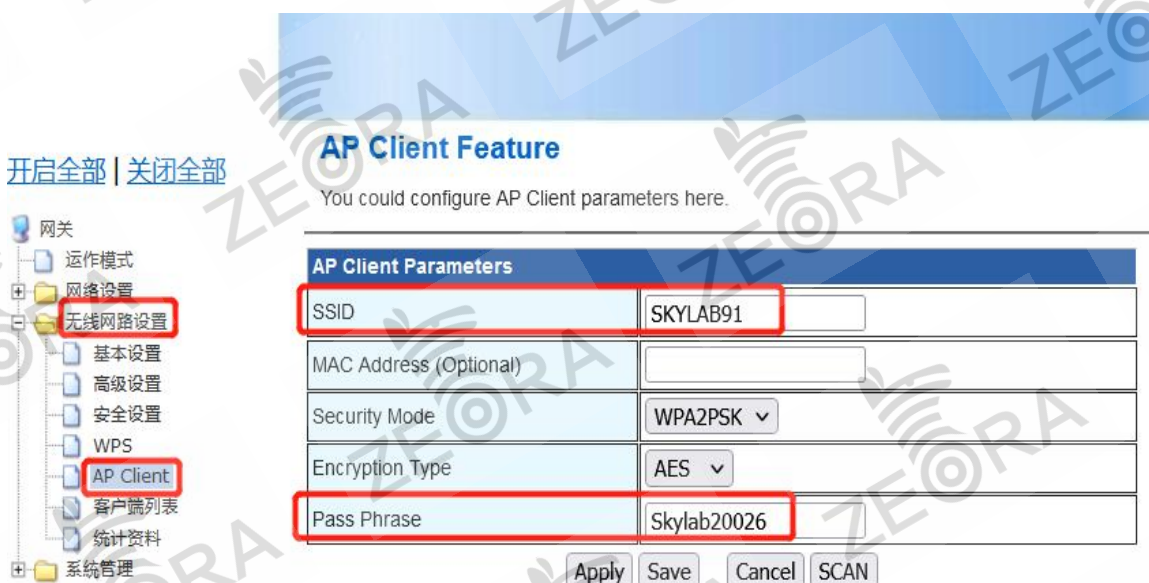


2. Set the WAN connection mode to Dynamic Acquisition as shown in the figure below: click "WAN", select "Dynamic (Auto-acquisition)" from the "WAN Online Mode" dropdown menu, then click "OK" to complete the configuration.



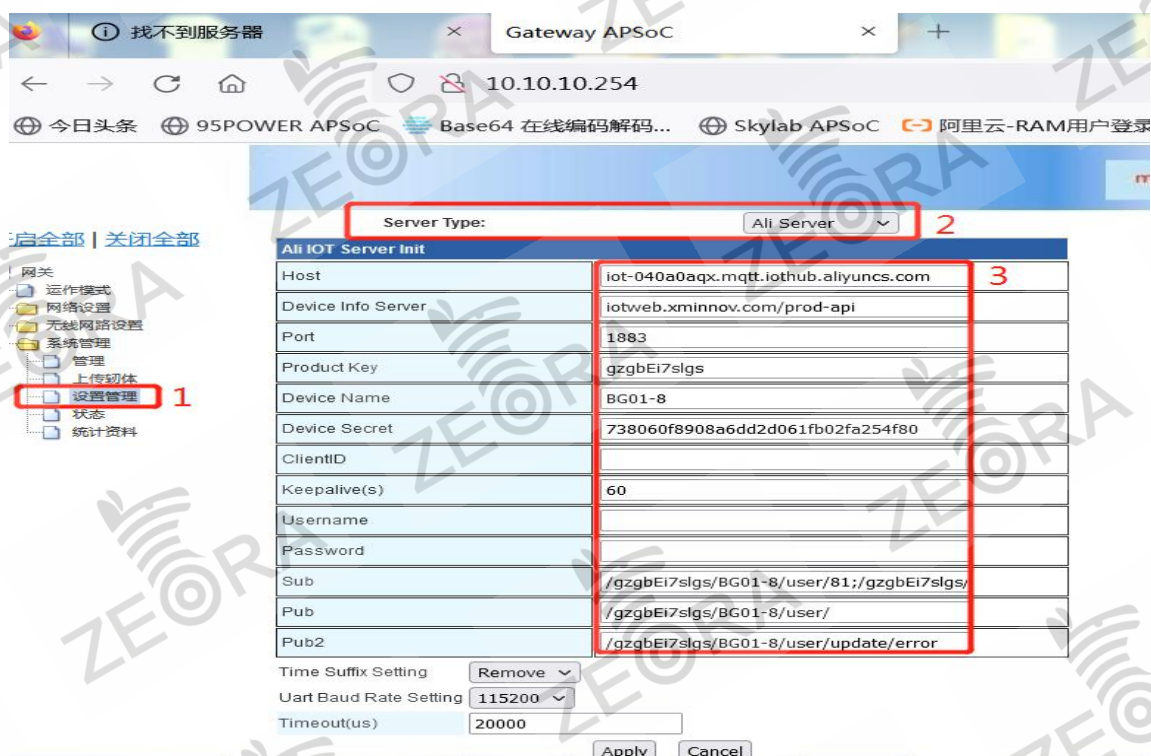
3. Under the "Wireless Network Settings" section, click "AP Client".

Enter your router's Wi-Fi name in the "SSID" field and your Wi-Fi password in the "Passphrase" field. Then click the "Apply" button to complete the configuration.



matters need attention :

When upgrading the gateway's WIFI module, first navigate to the "Settings Management" section under "System Management", select "Server Type" as "Ali Type", clear all parameters in the interface, and then perform a system reset as shown below.



IX. Packaging

Accessories List			
order number	name	quantity	remarks
1	ZSL-PT20 Gateway	1	
2	source	1	Optional
3	packing box	1	For packaging products and accessories