



Smart Wired Gateway **Pro**

(Matter Gateway)

THP10-ZX

Hardware Technical Specifications

Table of contents

1. Product Uses and Functions.....1

2. Product Features..... 1

3. Product Performance and Main Technical Specifications..... 2

4. Product Composition, Structure, and Working Principle..... 3

 4.1 Product Composition.....3

 4.2 Product Structure.....3

 4.3 Working Principle.....3

5. Product Packaging Box..... 4

6. Product Interaction Interface..... 4

7 Product User Manual..... 5

8. Frequently Asked Questions and Answers.....6



1. Product Uses and Functions

As the core of IoT connectivity, the Smart Wired Gateway Pro is Tuya's first wired gateway to support Matter.

The device is off; it supports uplink Ethernet connection to the cloud and downlink simultaneous support for Zigbee (compatible with Tuya's original Zigbee device ecosystem) and Thread.

(Matter over Thread device) Device access.

This gateway boasts powerful localized management capabilities and high stability for multi-device operation. It can connect to home devices.

All devices, including home automation, smart energy, and home security systems, provide users with an intelligent control experience.

The main functions of the Smart Wired Gateway Pro are as follows:

a) Adding, controlling, and managing devices: Users can add, control, and manage Zigbee sub-devices through the gateway.

Backup and Thread sub-devices, and support for near-field control and Tuya Cloud remote control;

b) Supports bridging Zigbee ecosystem devices to Matter (this is already supported on the gateway side, please note).

(Confirm device-side support with the Zigbee sub-device product line).

c) One-click networking (currently only for adding Zigbee sub-devices): Briefly press the button on the gateway to enter long configuration mode.

The network mode (the indicator light will flash slowly, indicating that the sub-device is allowed to connect) will last for 1 hour.

Once the sub-device to be added is in network configuration mode, it will be automatically added. Multiple devices are supported.

This also simplifies the cumbersome network configuration process, making device network operation more user-friendly. To disable...

One-click network access mode requires only one more short press of the button; (Adding is supported in both activated and deactivated gateway states)

Add this feature)

d) Cloud-based scenarios/automation: Through the scenario and automation settings in the APP, sub-gateways can be configured.

The device acts as an execution or trigger condition to interact with other smart devices.

e) Local Scenes/Automation: Scenes/automations are executed primarily using local methods. This feature allows users to...

The set smart scenarios/automations can still be executed efficiently even when the external network is down.

2. Product Features

1. The industry's first Matter authentication gateway.

2. Supports integration with third-party platforms such as Apple, Google, and Amazon.

3. Supports a rich ecosystem of sub-devices, compatible with the Tuya Zigbee device ecosystem, and also supports access to mainstream manufacturers' devices.

Standard Zigbee 3.0 devices, such as Hue and Smart Thing.

4. Supports adding Graffiti Thread devices and third-party Matter over Thread devices (Matter only).

Supported standard categories and standard functions).



5. Adding Zigbee sub-devices to the gateway is fast, with an average of 3-5 seconds for terminal devices to complete network access, and it supports...

Multiple sub-devices can be connected to the network simultaneously, and the addition of sub-devices without a network connection is also supported.

6. Supports large-scale network broadcasting and operates stably.

7. Fast control response. In the absence of signal interference, the time from command issuance to response is only 120ms.

8. Supports local area network control and reliable scenario control.

9. Supports reliable local linkage services and supports local linkage across gateways and protocols.

10. Supports OTA services at all stages, including gateways, sub-device terminals, and MCUs connected to terminal modules.

11. Supports country codes, allowing output power settings to be adjusted according to different countries.

12. Supports anti-accidental deletion function, effectively solving the problem of sub-devices going offline due to accidental touches by users on the local device.

13. It can remotely obtain local gateway logs and supports real-time reporting of sub-device error codes, gateway log sequence, etc.

It has strong maintainability in the later stages.

14. Enhanced data security: Device authentication employs TLS-based two-way encrypted authentication, and business data uses device-level encryption.

Encrypt data with a random key and store it locally; each device has its own unique key.

3. Product performance and main technical specifications

The product's appearance and physical characteristics are shown below:



name	Main configuration and performance
External dimensions	90mm×90mm×22mm
weight	74g
Power input	5V 1A
Power interface,	Micro USB
wireless protocol,	Zigbee, Thread
operating	-10°C to +55°C
temperature,	10% to 90% RH (non-condensing)
operating humidity,	-20°C to +60°C
storage temperature, storage humidity.	5% to 90% RH (non-condensing)



4. Product composition, structure and working principle

4.1 Product Composition

This product uses the SSD202D as the main controller, along with a low-power module ZS3L and a small number of peripheral circuits.

Successful. Supports multi-protocol communication including wired Ethernet, Zigbee, and Thread. Users can access it through the Tuya Smart APP.

This module enables device addition and remote monitoring. The main functions of each module are as follows:

a) Main control chip:

Category	parameter
Chip	SSD202D
Main	1.2GHz
Frequency	ARM Cortex-A7 Dual Core CPU
Kernel Operating System	Linux
Flash	1Gbit
DDR	128MB

b) Module (ZS3L):

The	parameter
standard	EFR32MG21A020F768IM32-B
frequency	80MHz
band for	IEEE 802.15.4
the main chip in this category is 2.4–2.483 GHz.	
Maximum output power 20dBm	
Operating channels 11-26	
Peripherals: 9×GPIOs, 1×UART, 1×ADC	
Wide operating voltage range: 2.0 V–3.8 V	
Onboard antenna with a gain of 1.0 dBi.	
Firmware upgrade supports OTA	

c) Electronic components: capacitors, resistors, and other related components;

d) Structural components: Made of PC+ABS material, with a white surface.

4.2 Product Structure

The product consists of two parts, an upper and a lower shell, which are ultrasonically welded together. Externally, it has one WAN port and one...

It has a Micro USB port, a button, and two indicator lights on the top.

4.3 Working Principle

The working principle of this product is shown in the following diagram:

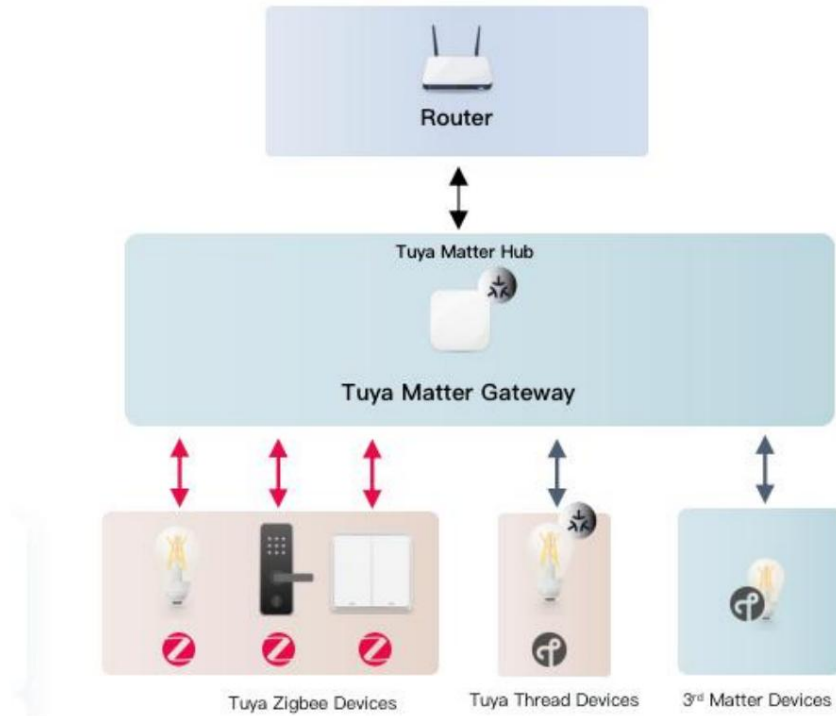


Figure 1. Product Principle and Architecture Diagram

5 Product Packaging Box

Product packaging box dimensions: 95mm×95mm×50mm (length×width×height).

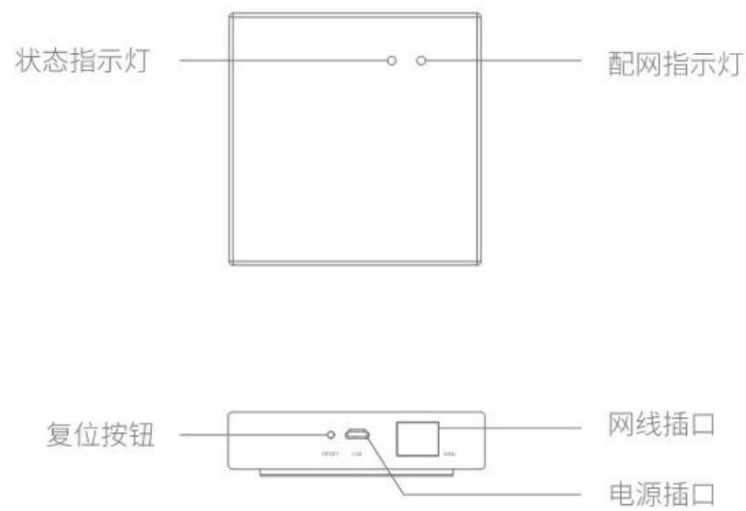
The product packaging box should include: Smart Wired Gateway Pro ×1; Product Manual ×1; Charging Cable ×1; Network Cable.

×1; Charger ×1 (optional);

15.

6 Product Interaction Interface

The product interface details are shown in the image below:



Product Interface Configuration			
Serial Number	Interface Project	Interface Specifications	Interface Purpose
1	Charging port	Micro USB	Charge the cable by inserting it into the port.
2	button	Touch button	Reset/Distribution Button Button function description: Press and hold for 5 seconds to enter. Reset state
3	The indicator	led	Indicates network and operational status
4	logic for the	RJ45	Connect the router via Ethernet cable.

Ethernet port's working status is as follows:

Indicator Logic		
	Product Status	Indicator light status
Network indicator light	Network cable connected to	Indicator light stays on
	router Not connected to	Indicator light always off
Status indicator lights	router	Indicator light always off
	Network	Indicator light stays on
	configuration pending system startup	Indicator light flashing

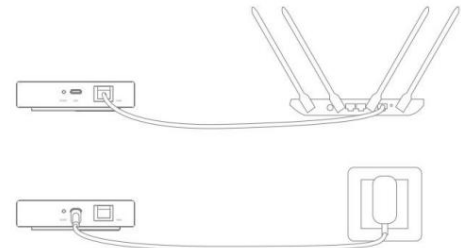
7 Product User Manual

Please refer to the following diagram for product usage instructions.



添加设备

- 将智能有线网关Pro接通电源,并通过网线和路由器相连
- 确认网关两个指示灯均长亮(如需重置,长按复位键5s以上后松手)



- 打开“智能生活”App首页,点击右上角“+”进入添加设备,点击右上角扫码入口添加设备,将手机对准机身上的二维码进行识别
- 依照提示流程操作设备入网

使用说明

- 添加子设备
网关添加成功后即可添加子设备,请参考APP上的指引操作
- 重置网络
长按网关按键5秒以上松手重置设备,设备初始化完成后会重新进入配网状态,重复 [添加设备] 步骤即可
- 提示:
 - 1.添加网关前请确保手机已连接2.4GHz频段的Wi-Fi网络
 - 2.为了使连接更顺畅,请尽量将手机靠近网关,并确保手机和网关处在同一Wi-Fi网络
 - 3.如添加失败或开机后未处于配网状态,请长按网关按键5秒以上重置设备,重新添加

Figure 2 Product User Manual Flowchart

8. Frequently Asked Questions and Answers about Products

Frequently Asked Questions are answered in the table below:

Table 1 Frequently Asked Questions

Serial Number	question	This
1	Are there Matter gateways that support wireless connectivity?	product only supports wired connections. For wireless connectivity, please contact [contact information missing]. Receive inquiries about other models from the product line.
2.	Does the product support 5G WiFi connectivity?	The product only supports mobile phones under 2.4G WiFi during network configuration and does not support 5G WiFi.
3	What is the number of sub-devices that can be mounted on the product? What is the stable control distance?	Supports 128 sub-devices
4.	How stable is the control distance?	Stable control distance: 35m indoors, 200m outdoors;
5	Which third-party platforms does the Smart Wired Gateway Pro (Matter Gateway) support?	Initially, we will primarily be working with Apple, Google, and Amazon. Please consult the product manager for specific support and operational procedures.
6	Can the Smart Wired Gateway Pro (Matter Gateway) be added to other providers' devices? Matter devices	Matter over Wi-Fi devices can communicate directly with other devices on a local area network via a router; third-party Matter over Thread devices can be connected to the Smart Wired Gateway Pro (Matter Gateway), but only within the product categories and basic functions specified in the protocol.