图纸发布类别：：正式归档图纸

成品尺寸	100*100
展开图尺寸	300*300
公差	±1mm
纸张	双胶纸

单位：mm

100mm

100mm

4G多模工程(BLE+ZigBee)网关

产品使用说明书及三包卡

警告：
此为A级产品，在生活环境中，该产品可能会造成无线电干扰。
在这种情况下，可能需要用户对干扰采取切实可行的措施。

微功率设备说明

（一）符合“微功率短距离无线电发射设备目录和技术要求”的具体条款和使用场景，采用扩频调制技术，数字调制，调频及开关等使用方法；
1、使用场景：用户通过转换器接收来自其他设备的信号，将天线接口与转换器相连，并通过转换器将信号传输给其他设备。
2、无线传输特性描述：Zigbee频率范围2.405～2.480GHz；传输速率：250Kbps；ZigBee EIRP Power≤10dBm；天线类型：外置鞭状天线。
3、控制、调整以及开关等使用方法：将天设备上电自动开机后，Zigbee功能自动启动，用户无需调整。
（二）不得擅自改变使用场景或使用条件，扩大发射频率范围、加大发射功率（包括额外加装射频功率放大器），不得擅自更改发射天线；
（三）不得对其他合法的无线电台（站）产生有害干扰，也不得擅自改变有害干扰保护；
（四）应当承受辐射射频能量的工业、科学及医疗（ISM）应用设备的干扰或其他合法的无线电台（站）干扰；
（五）如对其他合法的无线电台（站）产生有害干扰时，应立即停止使用，并采取措施消除干扰后方可继续使用；
（六）自配设备的天线须满足谐杂波、国家有关规定、标准划定的射电天文台、气象雷达站、卫星地球站（含测控、测距、接收、导航站）等常民用无线电台（站）、机场等的电磁环境保护区域内使用的功率设备，应当遵守电磁环境保护及相关行业主管部门的规定；
（七）禁止在以该场所最靠中心点为圆心、半径5000米的区域内使用各类模型遥控器；
（八）微功率设备使用时温度和湿度应为正常环境条件；
使用环境温度：-10℃～55℃
工作电压：DC 5V

使用说明

1.在应用商店搜索“易智光控”或扫描下方二维码，下载安装App并注册账号；
2.设备上电开机Wifi，蓝牙进行功能，设备进入开配网状态；
3.打开“易智光控”App，按如下提示进行配网操作：

【单品配网】
a.点击右上角“+”，传设备信息发现成功后点击“网关及其他→无线网关（蓝牙）”；
b.长按SET键3s，确认网关“network”蓝灯闪烁，点击下一步；
c.App自动搜索到“多模工程网关”，点击设备名称“+”；
d.输入WiFi账号及密码，点击下一步；
e.设备状态栏显示绿色“+”，点击下一步，点击完成，将设备分配到室内指定位置区域内，固定完成。

【子设配网】
a.使用网线，将网关连接路由器上，确保手机和Wifi网络处在同一局域网内；
b.点击右上角“+”，手动添加“网关及其他→无线网关（zigbee）”；
c.长按Wifi键3s，确认网关“network”蓝灯闪烁，点击下一步；
d.App自动搜索到“多模工程网关”，点击设备名称“+”；
e.设备自动进行配网操作，完成后提示，设备名称展示绿色“+”，点击下一步，点击完成。
将设备分配到室内指定区域内，固定完成。

【4G AP设置】
a.同时配置网络区域，点击“4G多模工程网关”；
b.输入网关用户名和密码，输入完毕点击“保存”；
c.点击“下一步”；
d.点击“下一步”；
如遇问题，网关会自动重启可搜索到该AP名称Zigbee子设备

单聚光控

电子信息产品有毒有害物质申明

部件名称	有毒有害物质或元素					
	铅 Pb	汞 Hg	镉 Cd	六价铬 Cr(VI)	多溴联苯 PBB	多溴二苯醚 PBDE
塑料件	○	○	○	○	○	○
金属	○	○	○	○	○	○
PCBA	○	○	○	○	○	○

本表依据SJ/T11364-2014的规定编制。
○:表示该有毒有害物质在该部件所有均质材料中的含量均在GB/T 26572-2011规定的限量要求以下;
X:表示该有毒有害物质至少在该部件的某一均质材料中的含量超过在GB/T 26572-2011标准规定的限量要求。

10 本标示内数字标识产品在正常使用状态下的环保使用期限为10年，某些部件也可能有环保使用期限标识，其环保使用年限以标识内的数字为准。

4G多模工程网关三包凭证

客户姓名_____(先生/小姐) 联系电话_____
客户地址_____ 序列号(SN)_____
产品型号_____ 购机日期_____

4G多模工程网关三包凭证

客户姓名_____(先生/小姐) 联系电话_____
客户地址_____ 序列号(SN)_____
产品型号_____ 购机日期_____

保修政策

4G多模工程网关的售后服务严格依据《中华人民共和国消费者权益保护法》、《中华人民共和国产品质量法》实行售后三包服务，服务内容如下

1、自您签收日起7日内，本产品出现产品性能故障，可免费享受退货或者换货服务；
2、自您签收日起8日-15日内，本产品出现产品性能故障，可免费享受换货或者维修服务；
3、自您签收日起12个月内，本产品出现产品性能故障，可免费享受维修服务。

非保修条例

1、未经授权的维修、误用、碰撞、疏忽、漏用、进液、事故、改动、使用非本产品配件，或拆除、涂改标签、防伪标记
2、已超过三包有效期。
3、因不可抗力造成的损坏。
4、其它非产品本身设计、技术、制造、质量等问题引起的损坏或故障。

产品介绍

4G多模工程网关具备有4G-LTE、Wifi、蓝牙、ZigBee通讯功能，通过集智光控App，用户可以处理常规用途和高级用途设备的添加、重置蓝牙/ZigBee群组控制等功能，以满足智能场景的需求。

4G	4G天线
BT	蓝牙天线
ZigBee	ZigBee天线
WIFI	WIFI天线
RJ45	有线网络端口
DC	电源接口
SIM	SIM卡安装位
SET	设置按钮
RES	复位按钮
PWR	电源指示灯
NET	配网指示灯

产品规格

产品名称	4G多模工程网关
产品型号	U033
电源输入	5V⎓2A
工作温度	-10℃ ~ 55℃
工作湿度	10%-90%RH(无冷凝)
网络支持	网络支持
	网络支持
	网络支持
	网络支持
产品尺寸	127.0*203*179mm（带天线）
产品净重	316g

本设备为工程类无线设备，适用于对数据传输速率要求较低的应用场景

包装清单

- 4G多模网关×1
- 产品说明书×1
- 适配器×1
- 外置天线×5
- 螺钉包×1

按键操作说明

SET 按键	短按 SET 按键，蓝灯慢闪（1500ms/次），进入长配网模式（1 个小时），设备自动添加子设备。再次短按，退出子设备添加模式
RES 按键	长按 5s 后，蓝灯长亮，设备进入重置状态，重置成功后，蓝灯快闪（500ms/次），设备进入待配网状态

指示灯状态说明

设备状态	指示灯状态说明
待配网状态	蓝灯快速闪烁（500ms/次）
配网成功	设备连云成功，蓝灯长亮 5s，然后熄灭
添加子设备	蓝灯慢闪（1500ms/次）
未激活状态上电	所有灯长亮至程序启动，程序启动后，蓝灯快闪（500ms/次），设备进入待配网状态
已激活状态断电再上电	所有灯长亮至程序启动，程序启动后，蓝灯快闪（500ms/次），如果设备连云成功，蓝灯长亮 5s，然后熄灭
已激活状态重置	长按 RES 按键 5s 后，蓝灯长亮，程序重启后，蓝灯快闪（500ms/次），进入待配网状态

100mm

100mm

4G Multi-mode Engineering(BLE+ZigBee) Gateway

Product instruction manual and three packs of cards

WARNING
This is an A-level product. In the living environment, this product may cause radio interference. In this case, it may be necessary for users to take practical and feasible measures against interference.

Micro power device description

1.Specific terms and usage scenarios in accordance with the "Catalogue and Technical Requirements for Micro Power Short-Range Wireless Radio Transmission Equipment", antenna types and performance used, control, adjustment, and switch usage methods;
1.Usage scenario:When users control other related devices through the gateway, the gateway communicates with other related devices through ZigBee.
2.Antenna type and performance:ZigBee frequency range 2.405-2.480GHz;Transfer rate:250Kbps;ZigBee EIRP Power≤10dBm;Antenna type:External pole antenna.
3.Control, adjustment, and switch usage methods:After the gateway device is powered on and automatically turned on, the ZigBee function automatically starts, and users do not need to adjust it.
(2) Do not change the usage scenario or conditions, expand the transmission frequency range, increase the transmission power (including the installation of additional RF power amplifiers), and do not change the transmission antenna without authorization;
3.It is not allowed to cause harmful interference to other legitimate radio stations (stations), nor is it allowed to propose protection from harmful interference;
4.Industrial, scientific, and medical (ISM) application equipment that should withstand interference from radiated radio frequency energy or other legitimate radio station (station) interference;
5.If harmful interference is caused to other legitimate radio stations, they should be immediately stopped from use and measures should be taken to eliminate the interference before continuing to use;
6.The use of low-power equipment in aircraft and in the electromagnetic environment protection areas of military and civilian radio station (station) control, airports, etc., such as radio observatories, meteorological radar stations, satellite earth stations (including measurement, control, receiving, navigation stations) and other ordinary radio stations (stations), airports, etc., shall comply with the provisions of the relevant regulations, and standards, shall comply with the regulations of electromagnetic environment protection and relevant industry authorities;
7.Prohibit the use of various model remote controls in areas with a radius of 5000 meters centered around the center point of the airport runway;
8.Environmental conditions of temperature and voltage during the use of micro power devices;
Operating ambient temperature: -10℃~55℃
Working voltage: DC 5V

Instructions for use

1.Search App:"Lightfinance "in the app store or scan the QR code below, download and install the App and register an account;
2.Wait for 3s on the device until the blue light flashes and the device enters the state of the network to be distributed;
3.Open the "Lightfinance "App and follow the following prompts for network distribution operations:

【Wireless Pairing】
a.Click "+" in the upper right corner to be automatically discovered by the device or manually add "Gateways and Others > Wireless Gateway (Bluetooth)";
b.Long press the Wifi key for 3s, confirm that the gateway "Network" blue light flashes, and click Next;
c.The App automatically searches for "Multimode Engineering Gateway", click "+" on the right side of the device name;
d.Enter your WiFi account and password, and click Next;
e.The light side of the device name displays a green "+", click Next, click Finish, assign the device to the space you specified, and the binding is complete.

【Wired Pairing】
a.Use the network cable to connect the gateway to the router to ensure that the mobile phone WiFi and the gateway are in the same LAN;
b.Click "+" in the upper right corner, click "Add Other Gateways", and select "Gateway (ZigBee)";
c.Press and hold the RES key for 5s, confirm that the gateway "Network" blue light flashes, and click Next;
d.App automatically searches for "multi-mode engineering gateway", click "+" on the right side of the device name;
e.The device automatically performs the network distribution operation, and the light side of the device name displays a green "+", click Next, click Finish, assign the device to the space you specified, and the binding is completed.

【Sub Device Add】
a.Click "4G multi-mode engineering gateway" after the gateway is successfully configured;
b.Click "Add Other Gateways", select "Add Sub Device" in the pop-up window;
c.Enter the center name and center APP number, and save the Settings.

【Add sub-device】
Press the SET key, and the gateway automatically binds searchable RLC or Zigbee sub-devices.

Light Store

Declaration of toxic and harmful substances in electronic information products

Part	Toxic and harmful substances or elements					
	Pb	Hg	Cd	Cr(VI)	PBB	PBDE
Plastics	○	○	○	○	○	○
Metal	○	○	○	○	○	○
PCBA	○	○	○	○	○	○

This table has been prepared in accordance with the provisions of SJ/T11364-2014.

○: Indicates that the content of the toxic and harmful substance in all homogeneous materials of the part is below the limit requirements stipulated in GB/T26572-2011;

X: Indicates that the toxic and harmful substances are at least contained in a homogeneous material of the component that exceeds the limit requirements specified in the GB/T26572-2011 standard.

10 The environmental protection period of the digital identification products in the normal use state in this label is 10 years, and some components may also have environmental protection service life identification, and the environmental service life is subject to the number in the logo.

Three-pack voucher

Name..... TEL.....
Add..... SN .....
Model..... Date .....

Three-pack voucher

Name..... TEL.....
Add..... SN .....
Model..... Date .....

Warranty Policy

The after-sales service of the 4Gmulti-mode engineering gateway is strictly based on the "Law of the People's Republic of China on the Protection of Consumer Rights and Interests" and the "Product Quality Law of the People's Republic of China", and the after-sales three-guarantee service is implemented, and the service content is as follows

1. Within 7 days from the date of your signature, if the product has a product performance failure, you can enjoy free exchange or exchange services for free.
2. Within 8-15 days from the date of receipt, the product has a product performance failure, and you can enjoy the exchange or maintenance services.
3. Within 12 months from the date of receipt, the product has a product performance failure, and you can receive free maintenance services.

Non-warranty regulations

1.Unauthorized repair, misuse, collision, negligence, abuse, liquid intake, accident, alteration, use of parts other than this product, or tearing or altering labels or security marks;
2. The regulatory period of the warranty card has exceeded.
3. Damaged by force majeure.
4. Other damage or failure caused by other problems such as design, technology, manufacturing, and quality of the product itself.

Product introduction

4G multi-mode engineering gateway has 4G LTE, WiFi, Bluetooth, ZigBee communication functions. Through the smart light App, users can remotely add other related devices and reset the Bluetooth /ZigBee group control, etc., to meet the requirements of intelligent scenarios.

4G	4G Antenna
BT	BT Antenna
ZigBee	ZigBee Antenna
Wi-Fi	WiFi Antenna
RJ45	RJ45 Network Connect
DC	PWR Connect
SIM	SIM Card Connect
SET	Set Key
RES	Reset Key
PWR	PWR LED
NET	Distribution Network LED

Key Operation Instructions

SET Button	Short press the SET button, the blue light will flash slowly (1500ms/time) to enter the long distribution network mode (1 hour), and the device will automatically add sub devices. Short press again to exit the sub device addition mode.
RES Button	After pressing and holding for 5 seconds, the blue light will remain on and the device will enter a reset state. After a successful reset, the blue light will flash quickly (500ms/time) and the device will enter a waiting network state.

Indicator Light Status Description

Device Status	Indicator Light Status Description
Waiting Distribution Network	Blue light flashing rapidly (500ms/time)
Successful Distribution Network	The device is successfully connected to the cloud, and the blue light remains on for 5 seconds before turning off.
Add Child Devices	Blue light flashing slowly (1500ms/time)
Power on In Inactive State	All lights remain on until the program starts. After the program starts, the blue light flashes quickly (500ms/time), and the device enters a waiting network state.
Power off And Then on In Activated State	All lights stay on until the program starts. After the program starts, the blue light flashes quickly (500ms/time). If the device is successfully connected to the cloud, the blue light stays on for 5s and then goes off.
Activated State Reset	After long pressing the RES button for 5 seconds, the blue light will remain on. After the program restarts, the blue light will flash quickly (500ms/time) and enter the waiting network state.

Product specifications

Product Name	4G Multi-mode Engineering Gateway
Product Modle	U033
Power Input	5V⎓2A
Working Temperature	-10℃ ~ 55℃
Working Humidity	10%-90%RH(non-condensing)
NetWork Support	网络支持
	网络支持
	网络支持
	网络支持
Product Size	127.0*203*179mm（带5天线）
Product Net Weight	316g

This device is an LTE single-antenna device, which is suitable for the application scenarios that require low-data transmission rate

Packing list
4G Multi-modeEngineering Gateway*1 Instructions*1
Adapter*1 Antenna*5 Screw pack*1

版本	物料编号	变更者	变更时间	版本升级原因描述

材质	双胶纸	客户	产品名称		物料名称		设计	
印刷色	印刷						审核	
加工工艺			型号		物料编号		时间	
接合方式								

FCC Warning

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any inte rference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interferenceto radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.