



OPU2120 User Manual



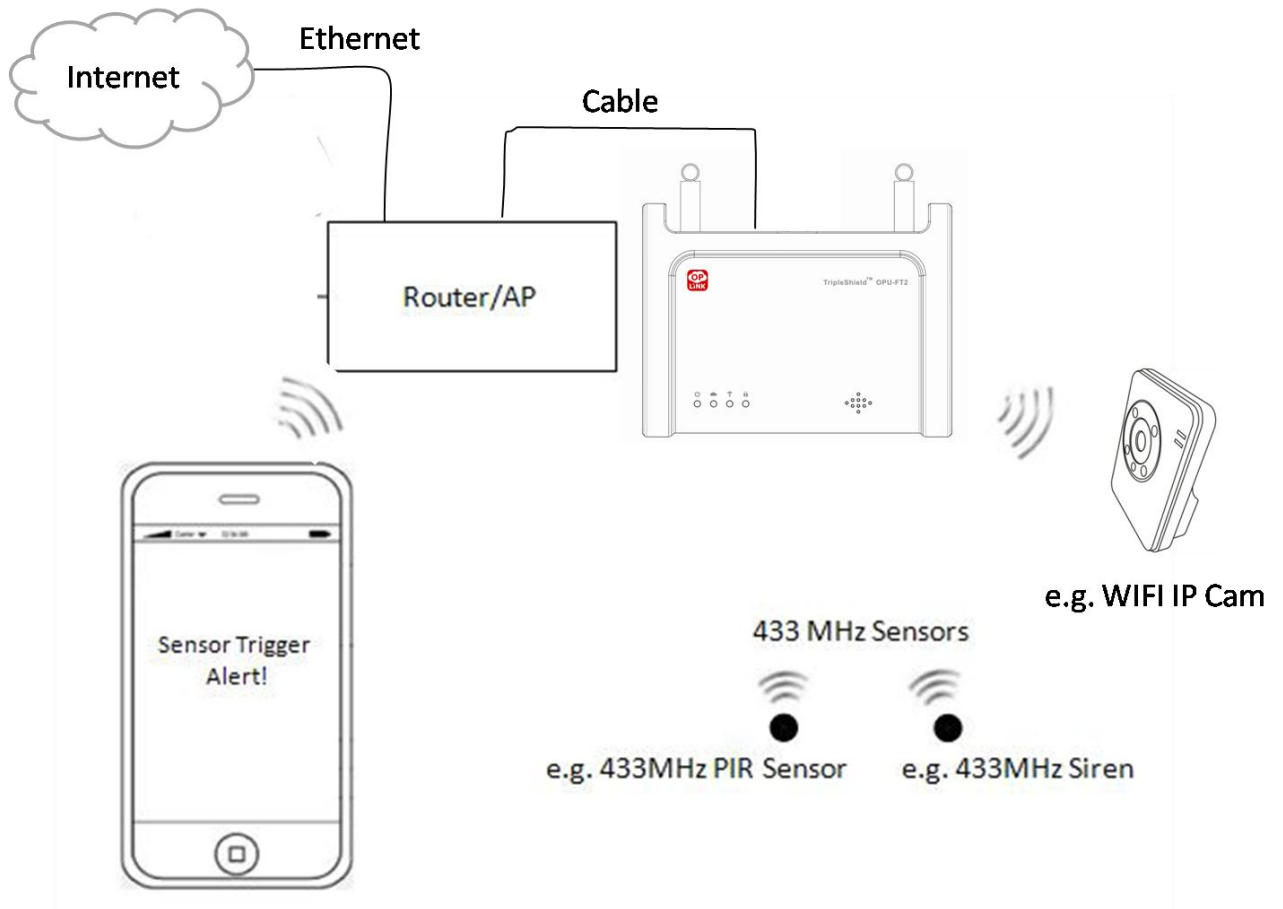
Version 1.01

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I. Product Introduction

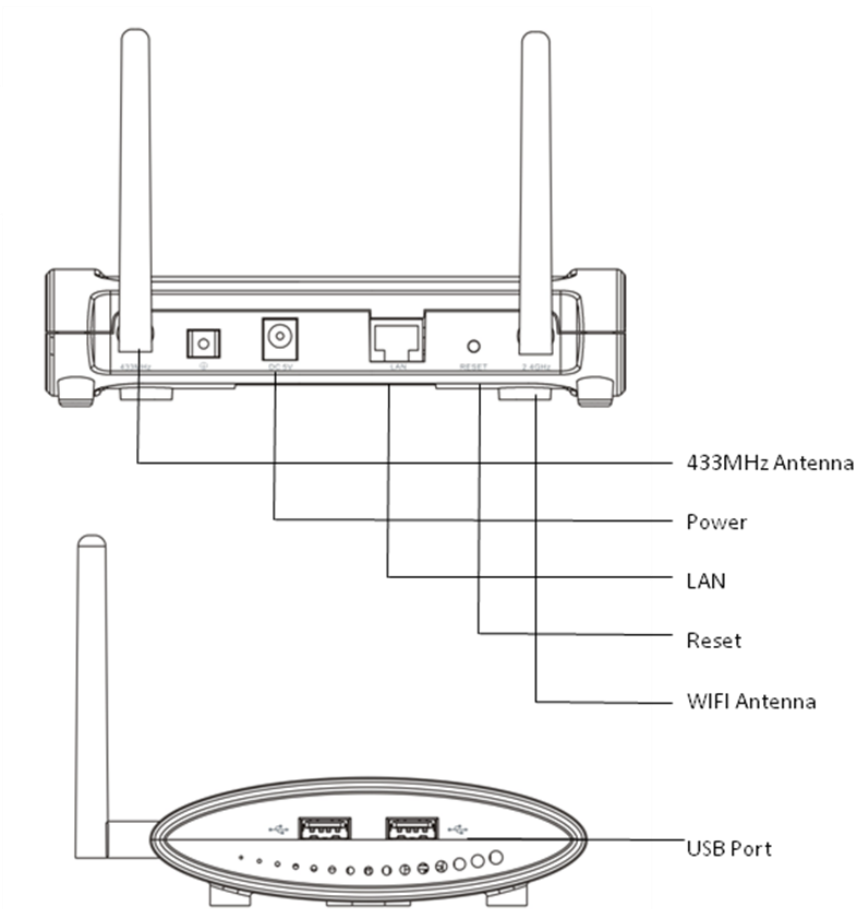
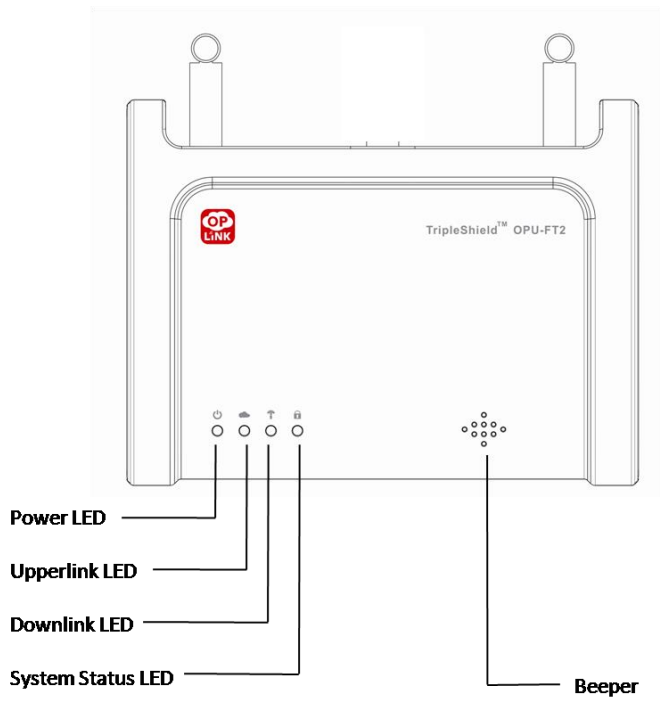
OPU2120 is a WIFI & 433MHZ RF integrated access controller, using for receiving and transmitting data from its matched devices. Matched devices are products which can transfer control signal remotely, such as alarm systems, door openers, remote switches etc.

System Structure





II. OPU2120 Port & Indication

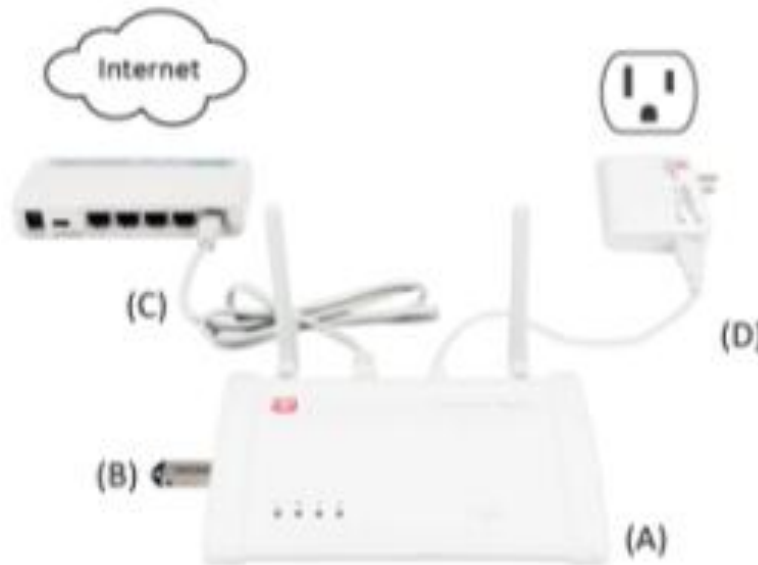


III. Installation & Workflow

OPU2120 is plug & activate, and no installation or configuration work is needed. Please connect it to the router and power up ,it will start to work.

1. Power up the OPU2120 and connect to a Router by Ethernet cable.

Setup Indication



2. Observe the LED indicator.
 - a. Solid Green Light :Power On
 - b. Solid Green Light :Upper Link Connection (Ethernet)
 - c. Solid Green Light: Downlink Connection (RF433)
 - d. Solid Green Light: Security System Armed

Cautions: LED light will be permanently on in blue once it is powered up.

This product does not transmit signal periodically, and, will transmit control signal to the alarm system only when sensors are triggered.

3. Download APP to activate the matched devices.



IV. RF Function Description

1. WIFI

- a. The matching WIFI devices such as IP Cam will send data through WIFI signal to OPU2120.
- b. The signal will be processed by a software client and transferred to video data.
- c. End user could watch the video through the software client.

2. 433MHz Function





- a. When the 433MHz sensor, which should be matching its system, is triggered, the OPU2120 will receive a 433MHz hex string signal.
- b. The signal will be processed by a software client and transferred to alert information to end user
- c. And at the same time, OPU2120 will send out a 433MHz hex string control signal to the Siren. The siren will receive the control signal and start to work.
- d. End user could stop the siren through software client.



V. Reference Specification

System	
Processor	RT5350F
System Flash	4 MB
System RAM	32 MB
Wireless	WIFI, RF433MHz
Accessory	Power Adapter
Adapter Output Power	5V /1.5A
Operating Environment	WorkingTemp:0°C~40°C Humidity:10%~90%RH non-condensing Storage Temp: -40°C~70°C Humidity:5%~90%RH
Function	
WIFI to LAN Router	
RF433MHz Transceiver	
WIFI Wireless	
Frequency	2.4~2.4835GHz
Transmit Speed	150Mbps(Max)
Wireless standard	IEEE802.11b/g/n
Channel	11
Bandwidth	20M/40M
Modulate Technology	DSSS
TX Power	12.68dBm
Antenna	External,2.5dBi
Wireless Security	WPA2-PSK
RF433MHz Wireless	
Frequency	433.92MHz
Transceiver Mode	Half-duplex
Modulate Type	ASK
Sensitivity	≤-108dBm
Antenna	External,2dBi
Output Power to Antenna	0dBm(Max)
Frequency offset range for receiver	± 162KHz
Frequency offset range for transmitter	± 58KHz
Data Rate	Transmit: 33kbit/s Receive: 3.1kbit/s
LED and Button	



LED Lights	Green
Power On	Solid Green Light 
Upper Link Connection (Ethernet)	Solid Green Light 
Downlink Connection (RF433)	Solid Green Light 
Security System Armed	Solid Green Light 
Buzzer Indication	1 short beep for arm system 2 continuous short beep for disarm system Continuous low short beep when either upperlink or downlink connection is out of function
Button	Reset Button
Port	
LAN	One 10/100Mbps LAN/WAN interchangeable Port ,IEEE 802.3 / IEEE 802.3u
USB Port	1x internal USB, 1x external USB, 1x USB flash
Power Port	DC a, 5.5mm diameter, 2.1mm inner diameter
Antenna	2.4GHz ANT (Ø10*110mm,2.5dBi) 433MHz ANT (Ø10*110mm, 2dBi)
Housing	
Material	ABS+PMMA (V0)
Dimension	159.1*120*35.5mm



FCC Statement

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 interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit 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 interference to 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.

***RF warning for Mobile device:**

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 & your body.