SkyNet SR7161 User Manual

1.1 Product Introduction

SkyNet SR7161 is a wireless access point product that supports the 802.11be standard protocol and adopts quad-radio technology, of which 6G-L/6G-H is used for backbone link backhaul and 2/5G user local network access. It adopts POE power supply, which is convenient for customers to deploy and use based on different application scenarios, and is suitable for parks, residences, business districts and other areas.

1.2 Product Appearance

The SkyNet SR7161 device includes 4 wireless RF ports, 1 adaptive Ethernet interface that supports up to 10GE and also supports IEEE 802.3 af/at/bt standard PoE power supply, 1 adaptive Ethernet interface that supports up to 1GE, and a USB-C Console management interface.

The product appearance is shown below:

Table 1. Main device interface function description

serial number	interface	Function Description
1	WAN/10G/POE++	The uplink adaptive Ethernet interface supports a maximum rate of 10Gbps and is used for business data transmission. Support IEEE 802.3 af/at/bt standard PoE power supply.
2	Reset button	Used to restart the device or restore the device to factory mode
3	LAN/1G	Uplink adaptive Ethernet interface for business data transmission.
4	USB-C Console	Used to access serial port management equipment

1.3 Packing list of equipment

Table 2. Main equipment packaging details

Serial number	name	quantity	unit
1	SR7161	1	pcs
2	Equipment fixing bracket	1	pcs
3	cable	20	meter
4	Waterproof rubber ring	2	pcs
5	POE Power Supply	1	pcs
6	Equipment support	1	pcs

	frame		
7	User Manual	1	pcs
8	Quick Installation Guide	1	pcs
9	Safety, Warranty, and Legal Information	1	pcs

1.4.1 Dimensions and weight

Table 3.Dimensions and weight

parameter name	SkyNet SR7161
Product size (diameter*height)	280mm*400mm
Host weight	4.8kg
Installation	Flat roof/Gable roof
Rack size (length, width, height)	450mm*280mm

1.4.2 Power supply and power consumption

Table 4.Power supply and power consumption

parameter name	SkyNet SR7161
Power receiving type	PoE Ethernet power supply (meets 802.3af/at/bf Ethernet power supply standard)
Conventional power consumption of the whole machine (under normal circumstances)	25W
Maximum design power consumption of the whole machine	45W

1.4.3 RF Specifications

RF specifications	SkyNet SR7161
RF Design	Quad RF
	The whole device supports 16 spatial streams
	Radio 0: 2.4GHz, 4 streams, 4x4, MU-MIMO
	Radio 1: 5GHz, 4 streams, 4x4, MU-MIMO
	Radio 2: 6GHz-H, 4 streams, 4x4, MU-MIMO
	Radio 3: 6GHz-L, 4 streams, 4x4, MU-MIMO
Working frequency	Radio 0: 802.11b/g/n/be, 2.400GHz ~ 2.483GHz Radio1: 802.11a/n/ac/ax/be, 5.150Ghz ~ 5.350GHz, 5.470GHz ~ 5.725GHz, 5.725GHz ~ 5.850GHz Radio2:802.11a/n/ac/ax/be, 6.525GHz ~ 7.125GHz Radio3:802.11a/n/ac/ax/be, 5.925GHz ~ 6.425GHz
Transmission rate	Radio0: 2.4GHz, 1.44Gbps@40M Radio1: 5GHz, 5.76Gbps@160M Radio2: 6GHz-H, 5.76Gbps@160M Radio3: 6GHz-L, 5.76Gbps@160M

Antenna Type	Built-in omnidirectional antenna
Antenna gain (Typical gain)	2.4GHz: 7.53dBi 5GHz: 8.12dBi 6GHz-L：9.86dBi 6GHz-H：8.81dBi

1.5 Legal and regulatory requirements

FCC Compliance Information Statement

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.

This device complies with part 15 of the FCC Rules. Operation is subject to the following three conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the

equipment.

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

To comply with FCC RF exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas used for this transmitter must be installed to provide a separation distance of at least 55 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC regulations restrict operation of this device to outdoor use only. The operation of this device is

prohibited on oil platforms, cars, trains, boats, andaircraft. We will comply with FCC regulations. 6 GHz outdoor Wi-Fi devices must be reported to the AFC system, which will manage the operation of the devices.

We, Wireless (US) Inc , has determined that the equipment shown as above has been shown to comply with the applicable technical standards, FCC part 15. There is no unauthorized change is made in the equipment and the equipment is properly maintained and operated.

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1.6 Equipment and manufacturer information

Model Name:SkyNet SR7161

FCC ID: 2BF3W-7161

Responsible party:Wireless (US) Inc

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