SUNSEA AIOT

Sunlight1000-F Indoor Small Cell

Product Description

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1.

Sunlight1000-F small cell is an integrated base station based on LTE technology. It supports access to the backbone network through wired backhaul, providing LTE access for terminals, completing transmission of voice and data services and realizes indoor wireless broadband coverage.

Over existing transmission resources, Sunlight1000-F small cell reduce operators investment and achieve low-cost construction of LTE networks quickly and indoor coverage to rapidly enhance user experience in homes, shops and other scenarios. They are widely used in telecom operators, broadband operators, enterprises and other fields.

The network structure of Sunlight 1000-F small cell accessing the LTE network is as shown below:

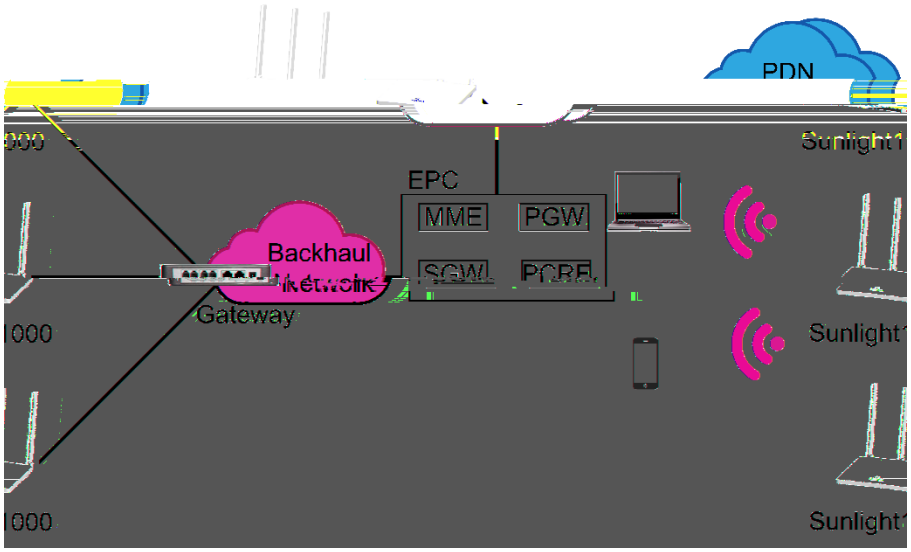

Figure 1-1. Sunlight 1000-F network structure

2.

- High integration by baseband and RF integrated design
- High-speed data services based on 3GPP LTE-FDD / TDD technology
- 5Mhz, 10MHz, 15MHz, 20MHz working bandwidth
- Convenient networking, flexible deployment, plug and play
- On-demand Integration to achieve accurate coverage and quickly increase the capacity of the existing network.
- External high-gain antenna suitable for different scenarios

- Built-in DHCP Server, DNS Client and NAT functions, providing powerful high-speed routing capabilities.
- Abundant security services that provide instant protection against potential security risks and unlawful intrusion.
- Convenient and intuitive Web-based management
- Perfect network management functions to complete the system management, monitoring and maintenance in the network management system.
- Compact and beautiful design, user-friendly indicator light to facilitate the observation of equipment status.

3.

Appearance and interface of Sunlight1000-F small cell are as shown below:

Figure 3-1. Sunlight1000-F appearance and interface

Table 3-1. Sunlight1000-F interface description

Interface	Description
PWR	DC12V power
RST	Power reset button
WAN	Gigabit Ethernet WAN interface for external transmission network access
LAN	Gigabit Ethernet LAN interface
GPS	External GPS antennas, SMA Male Connector(Optional)

Table 3-2. Indicator light instructions

Color	Status	Implication
White	On	Power on
	Slow flash	Cell is established.
	Fast flash	Data transmission
Red	On	There is strong interference surrounding cell alarm.
	Slow flash	Other alarms
	Fast flash	S1 alarm

4.

4.1

Item	Description
Working standard	LTE FDD
Working frequency	Band 1, Band 3, Band 5
Working bandwidth	5MHz/10 MHz/15MHz/20 MHz
Tx power	21dBm
Sensitivity	-102dBm
Synchronous mode	GPS, NL
Backhaul mode	RJ-45 Ethernet interface (1GE)
MIMO	2*2
Dimension	175mm (L) * 130mm (W) * 30mm (H)
Installation mode	Desktop/Ceiling/Wall Mounting
Antenna	External 5dBi omnidirectional antenna
Power consumption	< 10W
Power supply	220V AC/DC 12V power adapter
Weight	500g

4.2

Item	Description
Technical standard	3GPP Release 9
Maximum throughput	20 MHz: 150 Mbps DL, 50 Mbps UL 10 MHz: 75 Mbps DL, 25 Mbps UL
Service capability	32 active user
QoS feature	3GPP QCI
Modulation mode	Uplink: QPSK, 16QAM Downlink: QPSK, 16QAM, 64QAM

Item	Description
Voice service	CSFB, VoLTE, eSRVCC
Traffic offloading	LIPA(Local IP access) SIPTO(Select IP traffic offloading technology)
SON	Automatic configuration, ANR and PCI conflict detection
Uplink interference detection	Support
RAN Sharing	Support
Network management interface	TR069 interface protocol
MTBF	≥ 150000 h
MTTR	≤ 1 h
Operation and maintenance	Support remote/local maintenance, based on SSH protocol
	Support online status management
	Support performance statistics
	Support fault management
	Support configuration management
	Support for local or remote software upgrade and loading
	Support log
	Support connectivity diagnostics
	Support self-start self-configuration deployment
	Support alarm reporting

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