Com**Fi** W500

5G Dual Band Wi-Fi6 3000Mbps Outdoor High Power Wireless AP

Product Specifications

- External 6dBi~8dBi Omni-Directional Antenna
- Up to 100 devices
- Waterproof Outdoor Casing, IP67 Protection
- Support 5G NR NA/NSA Cellular Networks
- 3000Mbps, Dual Band WIFI6 802.11ax MU-MIMO
- Adjustable High Tx Power, Coverage Radius 200 Meter

Product Description

ComFi W500 is an outdoor 2x2 dual-band WiFi6 wireless AP, suitable for outdoor areas that require wireless coverage such as scenic spots, parks, schools, and squares. ComFi W500 supports 2x2 11ax, and the maximum concurrent connection rate of dual-band can reach up to 3000Mbps, which can build a stable and high-speed wireless network for users. ComFi W500 has high-performance wireless indicators, can get a larger wireless coverage area and better wall penetration performance. ComFi W500 supports the access of up to hundreds of wireless terminals to meet the application scenarios of high-density wireless terminals. At the same time, ComFi W500 also has good compatibility and supports the access of most wireless terminals on the market. Users can use mobile phones, tablets or laptops to easily connect.

ComFi W500 supports standard 48V PoE power supply and pole installation, and the installation and configuration are flexible and convenient. Users only need to spend a short time to complete the settings, you can enjoy the fun of surfing the Internet.

Product Features

5G Cellular Network

Support 5G NR mobile operator's networks. It is compatible with 5G networks of major operators in the market and backward compatible with 4G LTE and 3G WCDMA networks.

Wi-Fi6 (IEEE 802.11ax) Standard

- 802.11ax, as the latest generation of IEEE 802.11 Wi-Fi standard, can increase user access capacity and bandwidth in high-density access scenarios, reduce service delays, and enhance user experience.
- Support 2.4GHz and 5GHz dual-frequency UL/DL MU-MIMO, enabling AP to send data to multiple terminals at the same time, and the utilization rate of wireless spectrum resources is higher than predecessor 802.11ac.
- Support 1024QAM modulation, data transmission efficiency is increased by 40% compared with 802.11ac (256QAM).
- Support UL/DL OFDMA technology, use different subcarriers to transmit data to multiple terminals at the same time, reduce delay and improve network efficiency.
- Support spatial multiplexing technology, through the BSS coloring mechanism (BSS coloring) so that AP and terminal can distinguish overlapping BSS (basic service set), to minimize co-channel interference.
- Support target wake time* mechanism, allowing AP and terminal to negotiate sleep and wake time, reducing conflicts between terminals and unnecessary wake-up times, saving terminal power, and improving battery life.

Multi-User Uplink and Downlink-multiple Input and Multiple Output Technology (MU-MIMO)

Support MU-MIMO technology, support up to 4 spatial streams, 2.4GHz frequency band supports 2 spatial streams, 5GHz frequency band supports 2 spatial streams, through DL/UL MU-MIMO technology, AP can send data to multiple terminals at the same time, The utilization rate of wireless spectrum resources has been doubled, increasing the number of access users and bandwidth, and improving user experience in high-density access scenarios.

High-Speed Access

Supports 160MHz bandwidth. The increase in bandwidth has increased the available data sub-carriers and expanded the transmission channel; in addition, the use of 1024QAM modulation, MU-MIMO and other technologies makes the 5GHz single frequency band rate up to 2.4Gbps, and the whole machine rate is up to 3Gbps.

5GHz Priority

The AP supports both 2.4GHz and 5GHz dual-band access. By controlling the terminal to preferentially access the 5GHz frequency band, dual-frequency end users in the 2.4GHz frequency band are migrated to the 5GH frequency band, reducing the load and interference on the 2.4GHz frequency band, and improving user experience.

High-level Protection

- It adopts metal shell and overall heat dissipation design, suitable for wide temperature operation of -30°C to +65°C and adopts IP67 waterproof and dustproof design. Ethernet interface supports
- 6KA/6KV enhanced lightning protection, fully meet the requirements of industrial-grade use;
- Reinforced with metal fasteners and cable connectors to ensure connection fastening performance and equipment working stability;

External Indicator

The external high-bright status indicator light makes the equipment running status clear at a glance, saving troubleshooting time.

Hardware Specifications

Model	W500
Dimension	240mm x 195mm x 80mm (L x W x H) (Including N-Type connector)
Weight	1553g
Installation	Wall or Pole Installation
LED Indicators	PWR / NET / 2.4GHz / 5GHz
Interfaces	1 x GbE Uplink, Support 802.3at Power Supply 1 x SIM Card Slot Interface 4 x N-Type Antenna Connector (5G) 2 x N-Type Antenna Connector (WIFI)

Power Input	50V ~ 57V, 802.3at PSE

Environment

Operating Temperature	-40°C to +70°C
Storage Temperature	-40°C to +85°C
Operating Humidity	5% - 95% (non-condensing)
Air Pressure	86kPa ~ 106kPa Altitude
IP Rating	IP67
Safety Certification	SRRC, can do according to the customer's request

Stability

Annual Failure Rate	AFR < 1.5% (Continuous Operation Status)

Chipset Solution

CPU	MTK MT7981BA+MT7976CN+MT7531AE
Flash	32MB SPI NOR Flash
RAM	256MB DDR3L Memory

Wi-Fi Characteristics

Wi-Fi Standards	2.4GHz: 802.11b/g/n/ax 5GHz: 802.11a/n/ac/ax
Max Speed Rate	2.4GHz: Max. 574Mbps 5GHz: Max. 2400Mbps
Antenna	2 x Fiberglass Antenna and 2 x Internal Antenna
Working Frequency	2.4GHz Radio: 2.4000GHz ~ 2.4835GHz
	5GHz Radio: 5.150 ~ 5.850GHz
Max. Transmit Power	2.4GHz Radio: 24$\pm$2dBm@MCS0, 21$\pm$2dBm@MCS7 5GHz Radio: 24$\pm$2dBm@MCS0, 21$\pm$2dBm@MCS7
Data Rate	2.4G Radio: 802.11b: 1, 2, 5.5, and 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, and 54Mbps 802.11n HT20/HT40: MCS0~MCS15 (400/ 800ns GI) 802.11ax HE20/HE40: MSC0 ~ MCS11 (400/ 800ns GI)

	5G Radio: 802.11a: 6, 9, 12, 18, 24, 36, 48 and 54Mb/s 802.11n HT20/ HT40: MCS0~MCS15 (400/ 800ns GI) 802.11ac VHT20/VHT40/VHT80: MCS0 ~ MCS9 (400/ 800ns GI) 802.11ax HE40/HE80/HE160: MSC0 ~ MCS11 (400/ 800ns GI)
Reception Sensitivity	**802.11 b : -90 dBm@ 11 Mbps** **802.11g : -77dBm @ 54 Mbps**

802.11n:

	HT20	HT40
MCS7	-73dBm	- 72 dBm
MCS 11	- 65 dBm	- 61 dBm

2.4GHz 802.11ax:

	HT20	HT40
MCS 11	- 62 dBm	-6 1 dBm

5.8GHz 802.11ax :

	HT20	HT40	HT80
MCS 11	- 63 dBm	-62dBm	- 62 dBm

5G Sub-6 NR Technical Specifications

Cellular Technology	5G Sub-6 GHz	
Frequency Bands	5G NR (NSA)	n1/ 2/ 3/ 5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 29/ 30/ 38/ 40/ 41/ 48/ 66/ 70/ 71/ 75/ 76/ 77/ 78/ 79
	5G NR (SA)	n1/ 2/ 3/ 5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 29/ 30/ 38/ 40/ 41/ 48/ 66/ 70/ 71/ 75/ 76/ 77/ 78/ 79
	LTE-FDD	B1/ 2/ 3/ 4/ 5/ 7/ 8/ 12/ 13/ 14/ 17/ 18/ 19/ 20/ 25/ 26/ 28/ 29/ 30/ 32/ 66/ 71
	LTE-TDD	B34/ 38/ 39/ 40/ 41/ 42/ 43/ 48
	LAA	B46
	WCDMA	B1/ 2/ 4/ 5/ 8/ 19

Data Transmission	5G SA Sub-6	Max. 2.4Gbps (DL) / Max. 900Mbps (UL)
	5G NSA Sub-6	Max. 3.4Gbps (DL) / Max. 550Mbps (UL)
	LTE-FDD	Max. 1.6Gbps (DL) / Max. 200Mbps (UL)
	WCDMA	Max. 42Mbps (DL) / Max. 5.76Mbps (UL)
Antenna	Cellular x 4, GNSS x 1	
MIMO	DL: 4 x 4, UL: 2 x 2	
Antenna Type	External Antenna	

Product Views

Order Information

Product Model	Product Description
ComFi W500	Complete Product Unit including 1 x 48V PoE Power Supply (Optional) / 12VDC Power Adapter (Optional) 4 x 6dBi Omni-Directional Fiberglass Antenna (5G) 2 x 6dBi Omni-Directional Fiberglass Antenna (WIFI) 1 x Pole Mounting Gear 1 x Network Cable

To see more MovingComm products,

Visit:-
    Movingcomm official website http://www.movingcomm.com/en
    Movingcomm Alibaba global site: https://movingcomm.en.alibaba.com

深圳星恒讯科技有限公司
SHENZHEN MOVINGCOMM TECHNOLOGY CO., LTD.
Addr: 4F, No. 5 Building, TongFuKang ShuiTian Industrial Zone,
        ChangCheng Road, ShuiTian Community, ShiYan, BaoAn
        District, 518108 ShenZhen, GuangDong, China
Tel: 86-755-23125215
Fax: 86-755-23125215-802
Email: sales@movingcomm.com