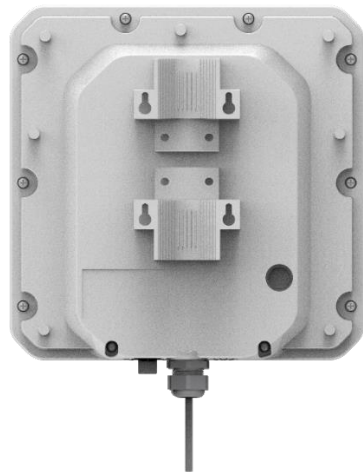


# MaxComm



## OWR-202

5G Sub6G Outdoor  
CPE with Indoor  
WiFi6 Router

3GPP Release 15

Sub6G

3GPP R15

WiFi6

OWR-202 is a highly advanced Sub-6G 5G NR outdoor+Indoor WiFi6 Router specifically designed to meet integrated data needs for residential, business and enterprise users. The product supports advanced Gigabit networking functionalities. It enables wide service coverage and provides high data throughput and networking features to customers who needs easy broadband access.

## KEY FEATURES

- 5G NR and LTE-A Cat20 Dual mode
- Wi-Fi 6 Supports 802.11ax, OFDMA, and MU-MIMO. Maximum 1.8Gbit/s throughputs
- Support both NSA and SA modes
- Worldwide Sub-6 5G and LTE-A coverage
- Built-in high gain wide bandwidth antennas
- Advanced MIMO, AMC, OFDM support
- Wi-Fi SON support
- Support two Gigabit Ethernet ports
- Powerful software features, support NAT, Bridge and Route mode
- IPv4&IPv6 and Multiple PDN support
- Built-in VPN and L2/L3 GRE client support
- WEB, TR069 and SNMP-based device management

## Hardware SPECIFICATIONS

### Cellular Bands:

#### Variant for Europe/Asia

5G NR: n41/n77/n78/n79/n1/n3/n5/n7/n8/n20/n28/n38/n40

LTE-FDD: B1/B3/B5/B7/B8/B18/B19/B20/B26/B28/B32

LTE-TDD: B34/B38/39/B40/B41/B42

WCDMA: B1/B3/B5/B6/B8/B19

#### Variant for North America

5G NR: n2/n5/n7/n12/n25/n41/n48/n66/n71/n77/n78

LTE-FDD: B2/B4/B5/B7/B12/B13/B14/B17/B25/B26/B29/B30/B66/B71

LTE-TDD: B41/B48

LAA: B46

# OWR-202 5G Sub6G Outdoor CPE with Indoor WiFi6 Router Specification

WCDMA: B2/B4/B5

## Cellular Data throughput

### Downlink:

- 5G SA Sub-6GHz: Max 2.1Gbps
- 5G NSA Sub-6GHz: Max 2.5Gbps
- LTE: Max 1.0Gbps (DL)
- WCDMA: Max 42Mbps

### Uplink:

- 5G SA Sub-6GHz: Max 900Mbps
- 5G NSA Sub-6GHz: Max 650Mbps
- LTE: Max 200Mbps
- WCDMA: Max 5.76Mbps

Note 1: This is UL highest speed. Not happen with DL speed list here.

## Tx/Rx

2Tx/8Rx

## Transmit Power

Class 3 ( $23 \pm 2$ dBm)

## Cellular Antennas

8 Built-in high gain directional antennas

## Chipset

- Host CPU: IPQ6018, Quad-A53 @ 1.8GHz
- Baseband: Qualcomm SDX55

## Storage

- Flash: 4Gb
- RAM: 4Gb

## Wi-Fi

- Wi-Fi support: 802.11b/g/n/ac/ax, Wi-Fi SON support

## OWR-202 5G Sub6G Outdoor CPE with Indoor WiFi Router Specification

- 4 Wi-Fi antennas, dual frequency

Antenna	Frequency Range	Gain	VSWR	Direction
ANT1~4	2400MHz ~ 2485MHz 5100-5875MHZ	2400~2485: 2.5dBi 5100~5875: 2.5dBi	<2.5	Omni

### Interfaces

Outdoor:

- 1\*Gigabit RJ45 LAN Ports with PoE
- 10/100/1000M auto-sensing, auto-MDI/MDIX
- 1 2FF USIM/SIM slot(1.8V/3V)

Router:

- 2 xRJ45 Gigabit Ethernet port
- 1 x Reset/Restore Button
- 1 x DC Power Jack

### LED indicator

Outdoor:

- 8 LED Indicators (RUN, SIM, ETH, SYS, RF Signal\*4)

Router:

- 1 x Power
- 1 x Wi-Fi
- 1 x 4G tri-color
- 1 x 5Gtri-color

### Power supply

- Outdoor: Input: AC 100~240V DC 48V 0.5A
- Router: Input: 100~240V AC, 12V 3A DC

### Dimension

- Outdoor: 288mm x 288mm x 88mm
- Router: 215mm x 160 mm x 95mm

# OWR-202 5G Sub6G Outdoor CPE with Indoor WiFi6 Router Specification

## Weight

- Outdoor: <2000g
- Router: <500g

## Humidity

- 5% to 95%

## Temperature

Outdoor:

- Operating: -30°C~ 55°C
- Storage: -40°C ~ 85°C

Router:

- Operating: 0°C~45°C;
- Storage: -40°C~70°C

## EMC compliance

- EN 55022: 2006/A1: 2007 (CE&RE) Class B
- IEC61000-4-2 (ESD) Level 3
- IEC61000-4-3 (RS) Level 4
- IEC61000-4-4 (EFT) Level 4
- IEC61000-4-5 (Surge) Level 4
- IEC61000-4-6 (CS) Level 3
- IEC61000-4-8(M/S) Level 4

## Environment compliance

- Cold: IEC 60068-2-1
- Dry heat: IEC 60068-2-2
- Damp heat cyclic: IEC 60068-2-30
- Change of temperature: IEC 60068-2-14
- Shock: IEC60068-2-27
- Free Fall: IEC60068-2-32

## OWR-202 5G Sub6G Outdoor CPE with Indoor WiFi6 Router Specification

- Vibration: IEC60068-2-6

### **Certification/Compliance**

- FCC and CE certification complied
- ROHS
- REACH
- WEEE

## **SOFTWARE SPECIFICATIONS**

### **Data Service**

- Supports four APNs (two for data, one for voice, and one for management)
- Supports Multi PDN
- Supports IPv4/6 dual stack

### **LAN**

- VLAN 802.1Q
- DHCP Server, Client
- DNS and DNS proxy
- DMZ
- Multicast/Multicast Proxy
- MAC Address Filtering
- GPS broadcast to LAN

### **WLAN**

- Compliance with IEEE 802.11a/b/g/n/ac/ax
- Maximum rate of up to 3.6 Gigabit/s
- Beam-forming
- MU-MIMO
- Short guard interval (GI) in 20 MHz, 40 MHz, 80 MHz, and 160 MHz modes
- Priority mapping and packet scheduling based on a Wi-Fi Multimedia (WMM) profile
- Automatic and manual rate adjustment
- WLAN channel management and channel rate adjustment

## OWR-202 5G Sub6G Outdoor CPE with Indoor WiFi6 Router Specification

- Automatic channel scanning and interference avoidance
- Service set identifier (SSID) hiding
- WPS
- Encryption: WEP, AES, and TKIP + AES
- Security mode: Open, WPA2.0 PSK, WPA1.0/WPA2.0 PSK, WEP Shared Key (four keys at most)

### **MANAGEMENT**

- Version management
  - ✓ Image Checksum
  - ✓ Active version and backup version
  - ✓ Auto Rollback version when upgrade fails
- HTTP/FTP Auto Upgrade
- TR069
  - ✓ Upload/Download the ACS specified file
  - ✓ Download the configuration file
  - ✓ Configure & Queries parameters
  - ✓ Remote upgrade
  - ✓ Remote debugging operations
  - ✓ Cycle monitor
- SNMP
- Web UI, CLI
  - ✓ Different level of user login priority and different limitation and display
  - ✓ Encryption backup current settings and restore the backup settings
  - ✓ Export of current diagnosis results and operation logs
  - ✓ Statistics of LAN link status, transmit and receive traffic and up time
- SNMP
- Diagnostics
- USIM PIN management and card authentication

### **VPN and Routing**

- Route Mode

## OWR-202 5G Sub6G Outdoor CPE with Indoor WiFi6 Router Specification

- Bridge Mode
- NAT mode
- Static Route
- Port Mirror
- ARP
- IPv4, IPv6 and IPV4/IPv6 Dual Stack
- Port forwarding
- IPsec
- PPTP
- GRE Tunnel
- L2TPv2 and L2TPv3
- VPN pass-through

### **SECURITY**

- Firewall
- MAC Address Filtering
- IP Address Filtering
- URL Filtering
- Access Control
- HTTPS Login from WAN
- Dos attack protection
- Hierarchical user management

## **Appendix-Delivers**

- 1 x OWR-202 Outdoor CPE unit
- 1 x Indoor Router WiFi6 Router unit
- 2 x Power adapter
  - 1\*PoE Switch
  - 1\*Mounting Accessories



## OWR-202 5G Sub6G Outdoor CPE with Indoor WiFi6 Router Specification

- 2 x 1M CAT6 Ethernet Cable
- 1 x Quick User Guide