

U501 5G mmWave CPE

High-Speed FWA Outdoor CPE.



Specification

Technical Standard	5G SA/NSA, mmWave, Sub-6GHz, 4G LTE
Operating Frequency	5G mmWave: n257/n258/n260/n261 5G Sub-6: n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n77/n78
5G Standard	3GPP Release 16
5G Peak Data Throughput (theoretical)	DL: up to 8.9 Gbps (mmWave) UL: up to 2.7 Gbps (mmWave)
MIMO	2x2
Chipset	Qualcomm SDX65
Antenna	Four (4) QTM547 mmWave antennas
EIRP	Up to 50 dBm
Ethernet	10GbE, PoE (802.3bt)
USIM	Nano SIM (4FF), optional eSIM
Wi-Fi	2.4 GHz WiFi4 1x1 (only for management)
IPv4/IPv6	Support
USB	USB-C (only for debugging)
Power Consumption	< 60 W
Cooling	Fan
Dimensions	214.5 x 132.5 x 60 mm
Weight	1500 g
Install	Pole/wall
Operating Environment	Temperature: -40°C to 50°C Humidity: 5% to 95%
IP Grade	IP65
Package	U501 CPE, Port Cover with Ethernet Cable, PoE Injector and AC Power Cord, Ethernet Cable, Mounting Kit

Product Overview

The **U501 5G mmWave CPE** is a high-speed packet access FWA terminal designed for outdoor use with an IP65 rating. It supports both 5G mmWave and Sub-6 technologies, working in SA and NSA mode. It is powered by PoE (802.3bt) and provides a 10GbE port that can transmit multi-gigabit high-speed connections for internet access. The **U501 5G mmWave CPE** is based on the Qualcomm SDX65 chipset, which conforms to 3GPP Release 16 standard, and four QTM547 mmWave antennas. It also supports **Ethernet PDU Session (5G LAN)**.

Key Features

-  **Operating Frequency**
5G mmWave:
n257/n258/n260/n261
-  **Ethernet**
10GbE, PoE (802.3bt)
-  **IP Grade**
IP65
-  **MIMO**
2x2
-  **Chipset**
Qualcomm SDX65
-  **Antenna**
4x QTM547

About Microamp

Microamp designs and delivers multi-gigabit, ultra-low latency 5G mmWave networks based on purpose-built radios. Leveraging deep tech expertise and a network of partners, Microamp empowers industries, System Integrators, MNOs, governments and research institutions with new dimensions of wireless connectivity.