GIGAMESH-NG

GigaMesh-NG is our top high-end WiMesh industrial router with the capacity to act as the core infrastructure of a Unified Mesh Mobile Backhaul network.

Infused with our LuceorOs operating system and the latest Wi-Fi6 technology, it enables the global deployment of our WiMesh technology-based network intelligence with its dynamic selection of the best available path for the ultimate combination of end-to-end performance, resiliency, security, power efficiency, and mobility.

GigaMesh-NG can create any network topology: point-to-point, point-to-multipoint, mesh, relay, Wi-Fi AP, or mixed.

3 x WIMESH

ROUTER

OUTDOOR RATED

LUCEOR

KEY FEATURES

1 x 4x4 MIMO 5GHz 802.11ax radio transceiver with up to 4.8Gbps throughput

1 x 2x2 MIMO 5GHz 802.11ax radio transceiver with up to 2.4Gbps throughput

1x 2x2 MIMO 2.4GHz 802.11ax transceiver

2 x 10/100/1000Mbps Ethernet, with support of POE+

Wide range for external MIMO antennas (up to 8 ports)

LuceorOS manages network traffic by dynamically and intelligently selecting the best connection

MeshTool Suite software and web interface operate in tandem to configure, troubleshoot, and monitor the network architecture

Plug-and-Play installation

Outdoor rated: IP67, -40°C to +80°C temperature range

Suitable for video surveillance, emergency services, public safety, industries, ports, monitoring systems, and other fixed and highly mobile networks

3D VIEWS

HARDWARE SPECIFICATIONS

CPU	Quad-core ARM 64bit A53 @1.8GHz, 1GB DDR3L, 32MB NOR Flash, 256MB NAND Flash			
WLAN	**Interface**	802.11ax 2x2 MIMO 2.4GHz	802.11ax 2x2 MIMO 5GHz	802.11ax 4x4 MIMO 5GHz
	Frequency[1]	2412 – 2482 MHz	5180 – 5825 MHz	5150 – 5950 MHz
	Modulation	OFDMA	OFDMA	OFDMA: BPSK, QPSK, DBPSK, DQPSK,16-QAM, 64-QAM, 256-QAM,1024-QAM, 4096-QAM
	Max. Physical Layer Data Rate	2.4Gbps	2.4Gbps	4.9Gbps
	Max. RF TX Power[2,3]	26dBm	23dBm	23dBm
	RX Sensitivity[4]			-76 dBm (11a @ 6 Mbps) to -57 dBm (11ax HE80 @ MCS11)

Ethernet Interfaces	2 x RJ-45, 10/100/1000BaseT, auto MDI/MDIX, active POE ,IEEE 802.3bt
Antennas	8 x N-Female connectors
LED Indicators	1 x Power indicator 2 x Status indicator
Button	1x push button to restore factory settings and restart the device
Power Supply	48 VDC Passive POE/ Active POE
Power Consumption[5]	Max. 25W
Dimensions	220 x 250 x 90 mm 8.66 x 9.84 x 3.54 in.
Weight	2.73 Kg 6 lb.
Temperature	-40°C to 80°C -40°F to 176° F
Wind Resistance	250Km/h
IP code	IP67
Materials	Aluminum

[1]Channel, Frequency Channel, frequency and bandwidth options will vary based upon regional and local regulations
[2]TX power is governed by local regulations and varies by frequency
[3]TX power Tolerance is ±2 dB
[4]RX sensitivity Tolerance is ±2 dB
[5]Power consumption depends on transceiver configuration

SOFTWARE SPECIFICATIONS

Networking	Compliance with 802.11s Mesh networking
	Compliance with IEEE 802.1q
	Proactive link-state routing protocol for Mesh networking
	SSID-based VLAN assignment
	Service set identifier (SSID) hiding
	Automatic and manual rate adjustment
	Automatic channel scanning and interference avoidance
	Frame aggregation, including A-MPDU (Tx/Rx) and A-MSDU (Tx/Rx)
	VLAN trunk on uplink Ethernet ports
	Management channel of the AP uplink port in tagged and untagged mode
	DHCP client, obtaining IP addresses through DHCP
	Tunnel data forwarding and direct data forwarding
	STA isolation in the same VLAN
	Access control lists (ACLs)
	Link Layer Discovery Protocol (LLDP)
	Network Address Translation (NAT)
	Virtual Router Redundancy Protocol (VRRP)
	Supports IPv6/ IPv4, UDP, TCP, ICMP, Telnet, SNMP, HTTP and FTP protocols
	Static IP, dynamic IP or zero-configuration deployment

Management	Web local management through HTTP or HTTPS
	Real-time configuration monitoring and fast fault location using the NMS
	SNMPv2c and v3
	System status alarm
	Network Time Protocol (NTP)
	Control and Provisioning of Wireless devices
	Remote software update
Security	Open system authentication
	WPA/WPA2/WPA-WPA2-PSK authentication and encryption
	Wireless intrusion detection system (WIDS) and wireless intrusion prevention system (WIPS)
	WPA/WPA2/WPA-WPA2-802.1x authentication and encryption with MAC address authentication, and Portal authentication
	802.1x authentication, MAC address authentication, and Portal authentication
	DHCP snooping
	IP Source Guard
	VPN / L2TP with AES encryption
	WPA, WPA2, and WPA-WPA2 support TKIP and CCMP encryption algorithms, where CCMP uses 128-bit advanced encryption standard (AES) encryption algorithm and has high security
QoS Features	Priority mapping and packet scheduling based on a Wi-Fi Multimedia (WMM) profile to implement priority-based data processing and forwarding
	WMM parameter management for each radio
	WMM power saving
	Priority mapping for upstream packets and flow-based mapping for downstream packets

STANDARDS AND CERTIFICATIONS

FCC	Part 15.C Part 15.E Part 15.247 Part 15.407 Part 1.1310 & 2.1091 Part 15.203 Part15.207 Part 15.205 Part 15.209
Environmental	IEC 60529 (IP67) RoHs compliance

ORDERING INFORMATION

| OWR-3000AX | GigaMesh-NG with three radio transceivers: one 2.4GHz, 2x2 MIMO,802.11ax, one 5GHz, 2x2 MIMO, 802.11ax and one 5GHz, 4x4 MIMO, 802.11ax |