MEGAMESH-NG

MegaMesh-NG comes in a rugged die-cast aluminum and environmentally sealed enclosure to withstand extreme outdoor environments. It is used to create point-to-point, point-to-multipoint, mesh and mobility networks with an exceptionally high throughput to enable data, voice and video applications. Infused with our patent operating system **LuceorOS,** multiple nodes are automatically linked and self-configured to form a broad mesh network and enable rapid deployment.

MegaMesh-NG provides up to three radio transceivers that can be activated on-demand to receive a wide range of external antennas and Ethernet interfaces to easily connect any IP device to the mesh network.

3 x WIMESH | **ROUTER** | **OUTDOOR RATED**

KEY FEATURES

- 2 x 2x2 MIMO 5GHz 802.11a/b/g/n/ac radio transceivers with useful throughput up to 500Mbps per radio
- 1x 2x2 MIMO 2.4GHz 802.11n transceiver
- Wide range for external 2x2 MIMO antennas (up to 6 ports)
- 2 x RJ-45, 10/100/1000 Mbps Ethernet, auto MDI/MDIX, support passive POE
- Plug-and-Play installation
- Outdoor rated: IP67, -40°C to +80°C temperature range
- 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
- 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 CPU ARM Cortex A7 up to 717MHz, 128 MB Nand Flash, 32MB Nor Flash and DDR3L 256 MB		
WLAN	**Interface**	802.11a/b/g/n 2x2 MIMO 2.4GHz	**2** x 802.11a/b/g/n/ac 2x2 MIMO 5GHz
	Frequency[1]	2412 – 2482 MHz	5180 – 5825 MHz
	Modulation	DSSS, CCK, OFDM	OFDM: 256-QAM, 64-QAM, 16-QAM, QPSK, BPSK
	Max. Physical Layer Data Rate	300 Mbps	866 Mbps
	Max. RF TX Power[2,3]	29 dBm	28 dBm
	RX Sensitivity[4]	-96 dBm (@ 6 Mbps) to -70 dBm (@ MCS7, MCS15, HT40)	-96 dBm (@ 6 Mbps) to -62dBm (@ MCS9, MCS19, MCS29, HT80)

Ethernet Interfaces	2 x RJ-45, 10/100/1000BaseT, , IEEE 802.3, auto MDI/MDIX, passive POE
Antennas	6 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
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
	Queue mapping and scheduling
	User-based bandwidth limiting
	Adaptive bandwidth management (automatic bandwidth adjustment based on the user quantity and radio environment)

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-3000ACN	MegaMesh-NG with three radio transceivers : one 2.4 GHz, 2x2 MIMO, 802.11an and two 5GHz, 2x2 MIMO, 802.11ac.

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