LUCEOR

MEGAMESH-2

Designed for harsh outdoor environments, **MegaMesh-2** is a member of the Luceor Industrial Routers range with the capacity to act as a mobile satellite end-point of Luceor WiMesh and HyMesh Mobile Backhaul network.

Embedded with the LuceorOS operating system, it powers the global WiMesh technology-based network intelligence which dynamically selects the best path available to provide the ultimate combination of end-to-end performance, resiliency, security, and seamless mobility along with rapid deployment and minimal operating costs.

With its 2x2 MIMO radio interface for usage with a wide choice of antennas, MegaMesh-2 router provides up to 500 Mbps of useful data and therefore ideal for mobile industrial equipment integration to deliver ground to mobile ultimate performance you need for your critical field applications in any circumstance.

WIMESH   **ROUTER**   **OUTDOOR RATED**

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KEY FEATURES

2x2 MIMO dual band 2.4GHz/5GHz 802.11a/b/g/n/ac radio transceiver

Useful throughput up to 500Mbps

2 x N-male connectors for external antenna

1x 10/100/1000Mbps Ethernet, Passive POE

GNSS interface (Galileo, Glonass, GPS, BeiDou)

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

HARDWARE SPECIFICATIONS

CPU	Dual core CPU ARMv8 800MHz, 1GB DDR4 and 8GB eMMC Flash Memory			
WLAN	**Physical Layer**	Complies with IEEE 802.11a/b/g/n/ac, supports 2x2 MIMO and provides a maximum rate of 866Mbps		
	Frequency[1]	2412-2472 MHz 5150-5825 MHz		
	Modulation	OFDM: 256-QAM, 64-QAM, 16-QAM, QPSK, BPSK		
	Max. RF TX Power[2,3]	27 dBm		
	RX Sensitivity[4]	2.4GHz	-93dBm @ nHT20, MCS0 to -76dBm, nHT20, MCS7	-92dBm @ nHT40, MCS0 to -73dBm, nHT40, MCS7
		5GHz	-93dBm @ n/ac HT20, MCS0 to -71dBm, n/ac HT20, MCS8	-88dBm @ n/ac HT80, MCS0 to -65dBm, n/ac HT80, MCS9
Navigation	Multi-constellation GNSS: GPS, Galileo, GLONASS, Beidou			
Antennas	2 x N-Female for WLAN 1 x SMA for GPS			
External Ports	1 x RJ-45, 10/100/1000 Mbps Ethernet, auto MDI/MDIX, passive POE 1 x USB2.0 port			
LED Indicators	1 x Power indicator 2 x Status indicator			
Power Supply	10V~60 VDC Passive POE			
Power Consumption[5]	Max. 13W			
Temperature	-40°C to 60°C -40°F to 140° F			
Wind Resistance	250Km/h			
Dimensions	121 x 214 x 90 mm 4.76 x 8.43 x 3.54 in.			
Weight	1.3 Kg 2.86 lb.			

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 15.407
ETSI	EN 300 328 V2.2.2 EN 301 893 V2.1.1 EN 301 489-1 V2.1.1 EN 303 413 V1.1.1
EN 62 311	
IEC 62 368-1	
IEC 60 950-22	
Environmental	IEC 60529 (IP67)

ORDERING INFORMATION

OWR-3000AC-B	MegaMesh2 with one radio transceiver, dual band 2.4GHz/5GHz, 2x2 MIMO, 802.11a/b/g/n/ac