

# MegaMesh Duo X



**MegaMesh Duo X** is our most advanced WiMesh industrial router with the capacity to act as the core infrastructure of a WiMesh mobile backhaul network.

Infused with our LuceorOs operating system and the latest Wi-Fi 6 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.

MegaMesh Duo X can create any network topology, including point-to-point, point-to-multipoint, mesh, relay, Wi-Fi AP, or mixed.

**3 x WIMESH**

**ROUTER**

**OUTDOOR RATED**

## 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

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

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

<sup>1</sup>Channel, Frequency Channel, frequency and bandwidth options will vary based upon regional and local regulations

<sup>2</sup>TX power is governed by local regulations and varies by frequency

<sup>3</sup>TX power Tolerance is ±2 dB

<sup>4</sup>RX sensitivity Tolerance is ±2 dB

<sup>5</sup>Power consumption depends on transceiver configuration

## SOFTWARE SPECIFICATIONS

<b>Networking</b>	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)
	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

<b>Management</b>	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
<b>Security</b>	Open system authentication
	WPA/WPA2/WPA-WPA2-PSK/WPA3 authentication and encryption
	Wireless intrusion detection system (WIDS) and wireless intrusion prevention system (WIPS)
	WPA/WPA2/WPA-WPA2-802.1x authentication and encryption
	IP Source Guard
	VPN with public key security (SSL/TLS mode) using client & server certificates.
	WPA, WPA2, and WPA-WPA2 support TKIP and CCMP encryption algorithms, where CCMP uses 256-bit advanced encryption standard (AES) encryption algorithm and has high security
<b>QoS Features</b>	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

<b>FCC</b>	Part 15.C Part 15.E Part 15.247 Part 15.407 Part 1.1310 & 2.1091 Part 15.203 Part 15.207 Part 15.205 Part 15.209
<b>Environmental</b>	IEC 60529 (IP67) RoHs compliance

## ORDERING INFORMATION

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**OWR-3000AX**

MegaMesh Duo X with three radio transceivers: one 2.4GHz, 2x2 MIMO, 802.11ax, one 5GHz, 2x2 MIMO, 802.11ax and one 5GHz, 4x4 MIMO, 802.11ax

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