

StartMesh



StartMesh comes in a compact, lightweight and waterproof package that provides a cost-effective solution for point-to-point or to connect devices located at the edge of a multipoint network. A key component of WiMesh solution, StartMesh is interoperable with all Luceor products to form a complete mesh solution.

Its integrated antenna, radio transceiver and Power over Ethernet (POE) interface make it ideal for CCTV applications and building-to-building connections.

OUTDOOR

WIMESH

ROUTER

KEY FEATURES

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

Built-in 14dBi 2x2 dual-slant polarization directional antenna

Useful Throughput up to 500Mbps

2 x 10/100/1000Mbps Ethernet (Passive POE)

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 +70°C temperature range

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	Physical Layer	Complies with IEEE 802.11a/b/g/n/ac, supports 2x2 MIMO and provides a maximum rate of 866Mbps	
	Frequency¹	U-NII-1: 5180 – 5250 MHz U-NII-2A: 5250 – 5330 MHz U-NII-2C: 5470 – 5725 MHz U-NII-3: 5725 – 5825 MHz	
	Modulation	OFDM : BPSK, QPSK, DBPSK, DQPSK, CCK, 16-QAM, 64-QAM, 256-QAM	
	Max. EIRP^{2,3}	41 dBm	
	RX Sensitivity⁴	nHT20	-96 dBm @ 6 Mb/s
	HT20	-93 dBm @ MCS8	-76 dBm @ MCS15

		HT40	-90 dBm @ MCS8	-73 dBm @ MCS15
		VHT20	-93 dBm @ MCS0	-71 dBm @ MCS8
		VHT40	-90 dBm @ MCS0	-68 dBm @ MCS9
		VHT80	-88 dBm @ MCS0	-61 dBm @ MCS9
Integrated Antenna	Gain	14 dBi		
	Polarization	Slant X		
	Beamwidth	35°/35° +/-5°		
Ethernet Interfaces	1x RJ45 output port ,10/100/1000BaseT, full duplex, IEEE 802.3, auto MDI/MDIX, passive POE 1x RJ45 input port , 10/100/1000BaseT, full duplex, IEEE 802.3, auto MDI/MDIX, passive POE			
LED Indicators	1 x RGB LED for RSSI and Alarm status			
Button	1x push button to restore factory settings and restart the device			
Power Supply	24 VDC Passive POE			
Power Consumption⁵	Max. < 9 W			
Temperature	Operating temperature: -40°C to 70°C -40°F to 176° F Storage temperature: -45°C to 105°C -49°F to 221° F			
Humidity	Operating Humidity : 5 to +95% (non-condensing) Storage Humidity : 0 to +90% (non-condensing)			
Wind Resistance	250Km/h			
Dimensions	165 x 165 x 54 mm 6.50 x 6.50 x 2.12 in.			
Weight	0.8 Kg 1.76 lb.			
IP code	IP67			
Materials	ABS, PTFE			

¹Channel, Frequency Channel, frequency and bandwidth options will vary based upon regional and local regulations

²Transmission power is governed by local regulations and varies by frequency

³EIRP power Tolerance is ±2 dB

⁴RX sensitivity Tolerance is ±2 dB

⁵Power 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

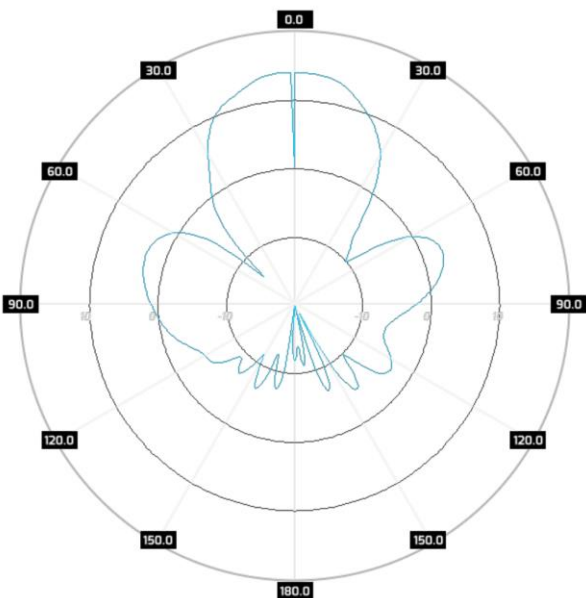
Queue mapping and scheduling
User-based bandwidth limiting
Adaptive bandwidth management (automatic bandwidth adjustment based on the user quantity and radio environment)

STANDARDS AND CERTIFICATIONS

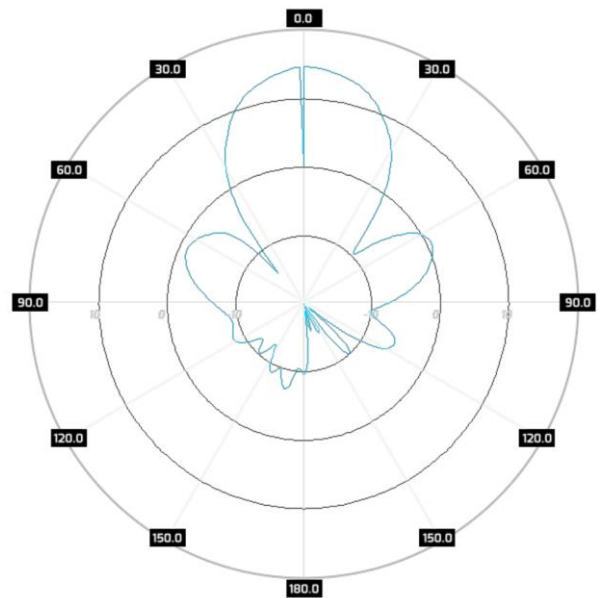
FCC	Part 15.C
	Part 15.E
	Part 15.247
	Part 15.407
	Part 1.1310 & 2.1091
	Part 15.203
	Part 15.207
Environmental	Part 15.205
	Part 15.209
	IEC 60529 (IP67)
	RoHs compliance

ANTENNA PATTERNS

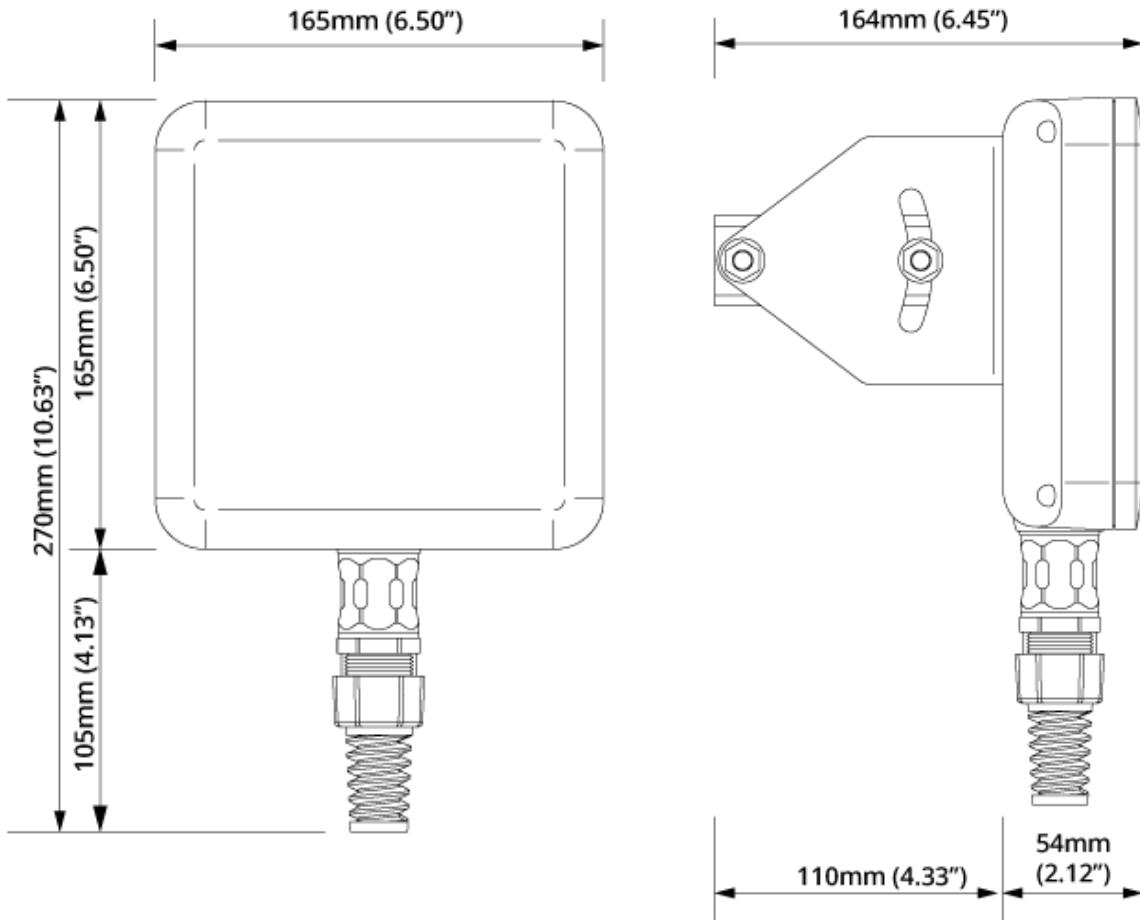
Elevation



Azimuth



DIMENSIONS



ORDERING INFORMATION

OWR-1000AC-A-IA14	StartMesh with one radio transceiver 802.11a/b/g/n/ac, 2x2 MIMO, 5GHz, and one integrated antenna, 14dBi.
	AL-001: 100-240VAC/24V DC 1A POE (IEEE 802.3at) power supply