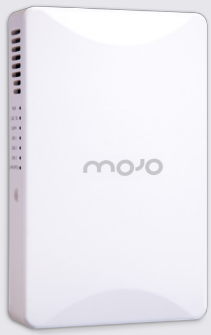
Datasheet

W-68

Dual radio, dual concurrent 2x2:2 MIMO 802.11ac Wave 1 access point

Key Specifications

- Wall-plate access point with five 1 Gb ports and two pass-through ports
- Up to 300 Mbps for 2.4GHz radio
- Up to 866 Mbps for 5GHz radio
- 802.11ac Wave 1 support
- 2x2 MIMO with two spatial streams per radio
- Four integrated omnidirectional antennas
- 20/40/80 MHz channel width support
- Full operational capacity with 802.3af PoE or DC power
- Vertcial (wall) mounting support
- Provides punch-down block for Ethernet and Pass-through input ports



Ergonomic Design and High Performance

The W-68 wall-plate access point is an enterprise grade MIMO 802.11ac access point with dual concurrent 5 GHz and 2.4 GHz band radios supporting 802.11a/n/ac, 802.11b/g/n, two spatial streams, and data rates of up to 866 Mbps and 300 Mbps, respectively.

Why Choose the W-68?

The W-68 is ideal to meet the ever increasing needs of hotels and their guests. High speed Wi-Fi will provide your guests with Internet connectivity and access to on-site amenities. The sleek ergonomic design can be placed in any location flush with the wall and can be installed easily by "non-IT" staff. The W-68 features four 1 Gb switch ports to support a range of in-room IP devices, reducing costs in additional cabling, switch, and power sourcing equipment. The phone pass-through supports standard digital telephones that require native access to an in-house PBX system. Additionally, one of the 4 wired ports can power devices such as IP telephones.

Mojo Cloud Managed WiFi

The W-68 is managed by the Mojo cloud managed platform which enables a complete workflow for wireless access, security and engagement. It leverages a purpose-built cloud architecture to produce enterprise-grade wireless networks for every application required, and ensures high reliability through an approach that is automated, scalable, secure and cost effective.

Key Features

- 100% controller-free
- Zero-touch deployment through automatic cloud activation and configuration
- Cloud-defined operating modes for dedicated access, dedicated security or dual-mode
- Support for up to eight distinct SSIDs per radio
- Integrated firewall, traffic shaping, QoS and BYOD controls per SSID
- Dynamic RF optimization through smart steering, band steering and optimal channel selection
- Application visibility through layer 7 deep packet inspection
- Automated device access logging
- No-WiFi VLAN monitoring for extended rogue access point detection
- Third party analytics integration for real-time data transfer
- Self-healing wireless mesh networking

What really matters

The future of WiFi requires intelligent, self-reliant access points that support high-performing, highly reliable networks without the need of antiquated controllers. This approach removes the complexity, instability and high costs associated to enterprise WiFi today.

Access

The W-68 creates WiFi networks that require less time and resources to deploy and maintain compared to traditional devices, resulting in significant cost savings.

- Mojo access points take less than two minutes to activate and configure after connecting to the cloud
- Support for up to eight individual SSID's per radio allows for maximum flexibility in network design
- Network controls like NAT, Firewall and QoS occur at the access point level, ensuring faster and more reliable networks
- Persistent scanning of all 802.11 channels results in increased insight and data about surrounding environmental factors that assist in RF optimization and client handling
- Smart steering addresses sticky client issues by automatically pushing clients with low speeds to a closer access point
- Band steering manages channel occupancy, pushing clients to the 5GHz channel for optimal throughput
- Access points continue to broadcast and support wireless networks even if their connection with the cloud is interrupted

Security

The W-68 offers complete visibility and control of the wireless airspace that keeps the integrity of the network in check and actively protects users without manual intervention.

- Every Mojo access point is equipped with the industry's only fully integrated wireless intrusion prevention capabilities
- Runs complete spectrum scans while simultaneously serving wireless clients without a third radio
- Mojo's patented Marker PacketsTM are used to accurately detect access points on any network with the fewest false positives in the industry
- Mojo access points can be converted to a dedicated security sensor with a single click for maximum wireless protection
- VLAN monitoring enables a virtual connection to non-WiFi networks for complete network rogue detection and prevention
- Automatic prevention combines over-the-wire and over-the-air techniques to keep unauthoirzed clients on the network and authorized clients on it
- Access points continue to scan for wireless threats and enforce security policy even if their connection with the cloud is interrupted

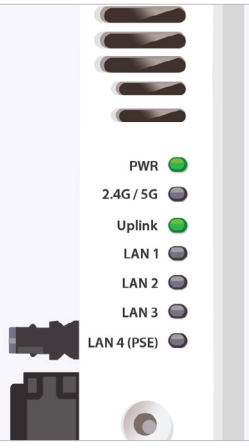
Engagement

The W-68 collects massive amounts of data and supports immersive guest network experiences that develops and reinforces the relationship between them and the brand.

- Persistent scanning of all 802.11 channels results in a comprehensive list of active wireless clients across the enterprise
- Choice statistics like location, duration, distance from access point and time of day are stored locally for every active wireless client
- Choice statistics like session duration, total data transfer up and down, data rate, smart device type and top-level domain are stored locally for every active connection
- Real-time notifications sent to third party systems that alert to the presence of enrolled devices
- Enables proximity marketing programs that trigger when certain devices are present
- Triggers automatic messaging via MMS, in-browser notifications and more

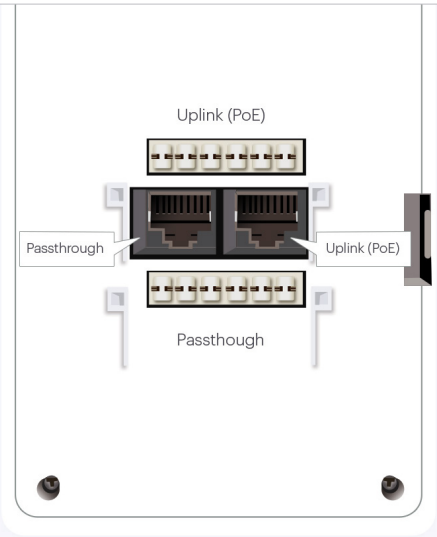
Physical Specifications

Side View



Property	Specification
Physical Dimensions	150 mm × 30 mm × 86 mm
Weight	0.53 lb. (0.24 kg)
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Humidity	5% to 95% non-condensing

Physical Specifications

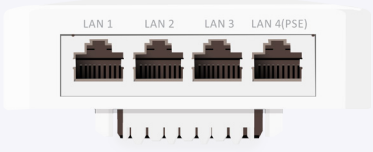


Rear View

Port	Description	Connector Type	Speed/Protocol
Passthrough	Wired port facilitating extension of the wired network after the AP is mounted on the wall. Another device can be plugged in to the pass-through port on the right side of the W-68 device. No policies can be applied on the pass-through port traffic.	RJ45 / Punch-down	10/100/1000 Mbps Gigabit Ethernet
Uplink (PoE)	Gigabit Ethernet port used to connect to the wired LAN and communicate with the Mojo Cloud or Server. This port can also be used to power the device using the 802.3af Power over Ethernet (PoE) standard.	RJ45 / Punch-down	10/100/1000 Mbps Gigabit Ethernet 802.3af Class 0 PoE PoE input voltage: 48V

Side View

Port	Description	Connector Type	Speed/Protocol
Passthrough	Wired port facilitating extension of the wired network after the AP is mounted on the wall. Another device can be plugged in to the pass-through port on the right side of the W-68 device. No policies can be applied on the pass-through port traffic.	RJ45	10/100/1000 Mbps Gigabit Ethernet
Reset	Reset to factory default settings	Pin-hole push-button	Hold down and power cycle the Sensor to reset
Power	48V DC input jack that can be used to power the device.	3.5 mm barrel	N/A

	Port	Description	Connector Type	Speed/Protocol
 Side View	LAN 1 LAN 2 LAN 3 LAN 4	Gigabit Ethernet port that can be used for wired extension for an SSID	RJ45	10/100/1000 Mbps Gigabit Ethernet

Wi-Fi Specifications

Frequency, Modulation, and Data Rates

IEEE 802.11b/g/n			
Frequency Band	Scanning	Transmission	
	All regions	USA & Canada (FCC/IC)	Europe (ETSI)
	2400 ~ 2483.5Mhz	2400 ~ 2473.5Mhz	2400 ~ 2483.5Mhz
Modulation Type	DSSS, OFDM		
Data Rates	Up to 300 Mbps (MCS 0-23) with automatic rate adaptation		
Antenna	Integrated modular high efficiency PIFA omnidirectional antenna		

IEEE 802.11a/n/ac			
Frequency Band	Scanning	Transmission	
	All regions	USA & Canada (FCC/IC)	Europe (ETSI)
	4.92 ~ 5.08 GHz 5.15 ~ 5.25 GHz 5.25 ~ 5.35 GHz 5.47~ 5.725 GHz 5.725~ 5.825 GHz	5.15 ~ 5.25 GHz 5.25 ~ 5.35 GHz 5.725~ 5.82 5GHz	5.15 ~ 5.25 GHz 5.25 ~ 5.35 GHz 5.47~ 5.725 GHz
Dynamic Frequency Selection	DFS and DFS2		
Modulation Type	OFDM		
Data Rates	Up to 866 Mbps (MCS 0-9) for 11ac with automatic rate adaptation Up to 300 Mbps (MCS 0-23) for 11n with automatic rate adaptation		
Antenna	Integrated modular high efficiency PIFA omnidirectional antenna		

Maximum Transmit Power

For 2.4GHz

MCS Index	Target Power(dBm)
802.11b	
1 Mbps	18
2 Mbps	18
11 Mbps	18
802.11g	
6 Mbps	17
36 Mbps	17
48 Mbps	17
54 Mbps	15
802.11n HT20	
MCS 0,1,2,3,4,5	17
MCS 6,7	15
MCS 23	17
802.11n HT40	
MCS 0,1,2,3	17
MCS 4,5,6	16
MCS 7	15

Country-Wise Max Transmit Powers (dBm)

Countries	2.4GHz	5Ghz
Australia	20	23
Canada	30	23
India	20	20
Israel	20	20
Japan	20	20
UAE	20	17
USA	20	23

Note: The actual transmit power will be the lowest of:

- Value specified in the Device Template
- Maximum value allowed in the regulatory domain
- Maximum power supported by the radio

For 5GHz

Transmitter	Target Power(dBm)
802.11a	
6 Mbps	17
36Mbps	17
48 Mbps	17
54 Mbps	14
802.11n HT20	
MCS 0,1,2,3,4,5	17
MCS 6,7	16
802.11n HT40	
MCS 0,1,2,3	17
MCS 4,5,6	16
MCS 7	15
802.11ac HT20	
MCS 0,1,2,3,4,5	17
MCS 6,7	16
MCS 8	15
802.11ac HT40	
MCS 0,1,2	17
MCS 3,4,5,6	16
MCS 7	15
MCS 8	14
MCS 9	13
802.11ac HT80	
MCS 7	16
MCS 7	15
MCS 7	14
MCS 8,9	13

Receive Sensitivity

For 2.4GHz

MCS Index	Receive Sensitivity
802.11b	
1 Mbps	-96
11 Mbps	-91
802.11g	
6 Mbps	-94
36 Mbps	-82
48 Mbps	-79
54 Mbps	-76
802.11n HT20	
MCS 0	-94
MCS 1	-90
MCS 2	-88
MCS 3	-84
MCS 4	-80
MCS 5	-76
MCS 6	-74
MCS 7	-73
802.11n HT40	
MCS 0	-90
MCS 1	-88
MCS 2	-85
MCS 3	-80
MCS 4	-78
MCS 5	-74
MCS 6	-72
MCS 7	-70

Receive Sensitivity

For5GHz

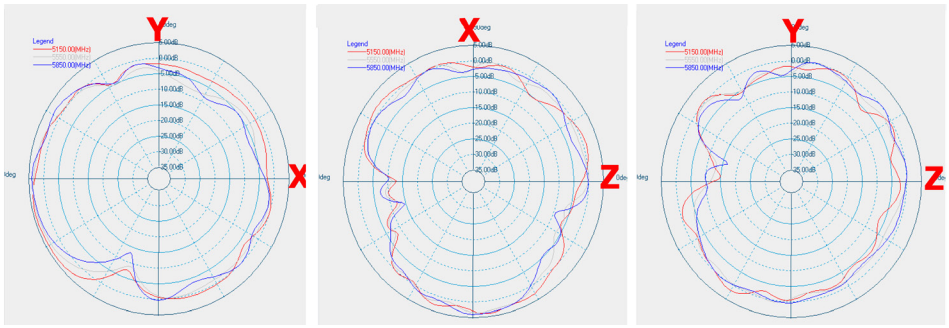
MCS Index	Target Power(dBm)
802.11a	
6 Mbps	-93
2 Mbps	-81
11 Mbps	-75
802.11n HT20	
MCS 0	-92
MCS 1	-89
MCS 2	-87
MCS 3	-82
MCS 4	-79
MCS 5	-75
MCS 6	-73
MCS 7	-72
802.11n HT40	
MCS 0	-89
MCS 1	-86
MCS 2	-83
MCS 3	-79
MCS 4	-76
MCS 5	-72
MCS 6	-71
MCS 7	-69

MCS Index	Receive Sensitivity
802.11ac VHT20	
MCS 0	-92
MCS 1	-89
MCS 2	-92
MCS 3	-82
MCS 4	-79
MCS 5	-75
MCS 6	-73
MCS 7	-71
802.11n VHT40	
MCS 0	-89
MCS 1	-86
MCS 2	-83
MCS 3	-79
MCS 4	-76
MCS 5	-72
MCS 6	-71
MCS 7	-69
MCS 8	-65
MCS 9	-63
802.11ac VHT80	
MCS 0	-86
MCS 1	-83
MCS 2	-81
MCS 3	-76
MCS 4	-73
MCS 5	-69
MCS 6	-67
MCS 7	-65
MCS 8	-61
MCS 9	-61
MCS 9	-59

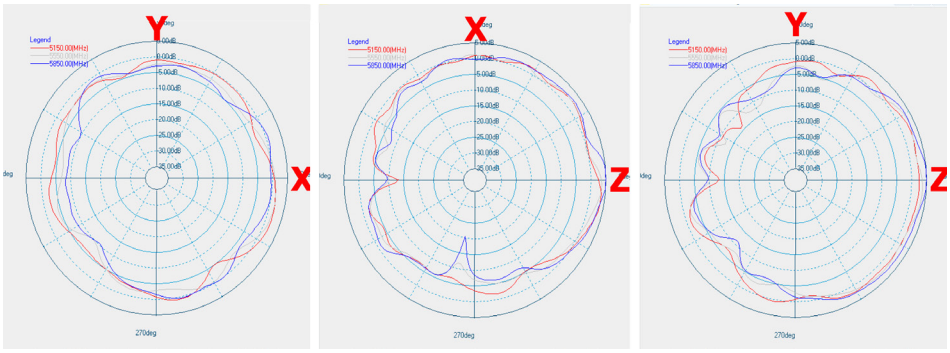
Internal Antenna Radiation Patterns

5 GHz

Antenna 1

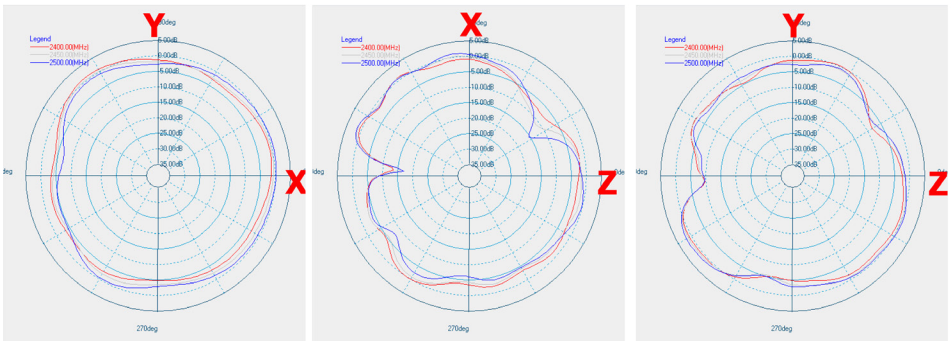


Antenna 2

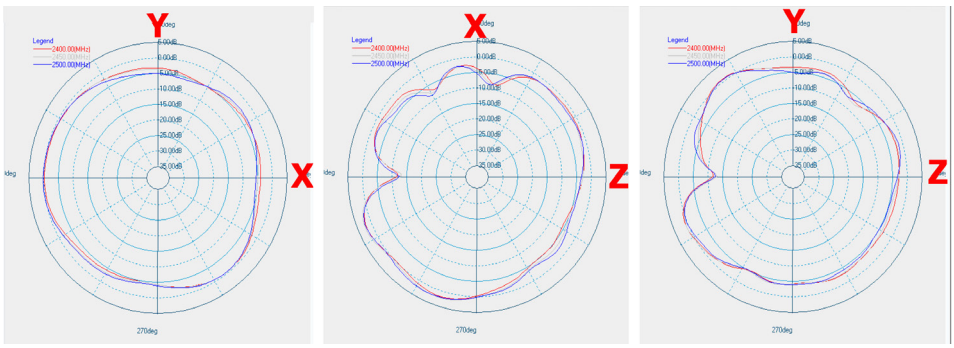


2.4 GHz

Antenna 1



Antenna 2



About Mojo Networks, Inc.
Mojo Networks is redefining the modern WiFi platform. Imagine the scalability to set up millions of access points with a few clicks, all from your smartphone. Envision an Internet experience that engages users with your business to drive results. Stay secure on the same WiFi cloud powering major brands and the highest levels of government. And enjoy the cost savings of a cloud-first solution without the pricey markup of proprietary hardware. Welcome to the era of prolific connectivity. Founded in 2003, Mojo Networks (formerly known as AirTight Networks), serves customers in the Fortune 500, Global 2000 and large carriers around the world. Request a free demo of Mojo Cloud Managed WiFi Platform at **www.mojonetworks.com**

Wall-Mount Bracket Support

The wall-mount bracket packaged with the Mojo W-68 access point is designed for support in the following countries:

- US
- UK
- Germany
- Holland
- China
- Australia
- New Zealand

Regulatory Specifications

RF and Electromagnetic

Country	Certification
USA	FCC
Canada	IC
Europe	CE Countries covered under Europe certification: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, UK, Switzerland, Norway, Iceland, Poland, The Czech Republic, Hungary, Estonia, Latvia, Lithuania, Malta, Cyprus, Slovakia, Slovenia.
Japan	TELEC
India	WPC

Safety

Country	Certification
USA	UL, UL2043
Canada	cUL
International	CB (based on IEC standards)
European Union (EU)	Directive 2002/95/EC, RoHS

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