Datasheet

C-130

Tri radio 4x4:4 MU-MIMO 802.11ac Wave 2 access point

Key Specifications

- Up to 800 Mbps for 2.4GHz radio
- Up to 1.733 Gbps for 5GHz radio
- 802.11ac Wave 2 support
- 4x4 MU-MIMO with four spatial streams per radio
- Third 2x2 MIMO radio for dedicated RF and WIPS scanning
- Ten integrated omnidirectional antennas
- 20/40/80/80+80 MHz channel width support
- 2x Gigabit Ethernet port
- Full operational capacity with 802.3at PoE
- Wall and ceiling mounting support

Ultimate Blend of High Performance and Full-Time Security

The Mojo C-130 is an enterprise-grade 4x4 MU-MIMO tri radio 802.11ac access point with dual concurrent 5 GHz and 2.4 GHz band radios supporting 802.11a/n/ac Wave 2, 802.11b/g/n, four spatial streams, and data rates of up to 1.733 Gbps and 800 Mbps, respectively. It is the only access point today that contains a third 2x2 MIMO 802.11ac radio for dedicated multi-function scanning.

Why Choose the C-130?

The C-130 is the only access point that provides consistent, high performance access with automatic, over-the-air threat prevention. The C-130 removes the need to sacrifice application performance for high security, and is a must for all critical, high-density networks that expect a high volume of diverse clients with diverse needs. Common deployment scenarios include large schools, large remote offices, auditoriums, meeting rooms, and enterprise campuses.

With its Wave 2 chipset, the C-130 takes advantage of the latest modulation and beamforming techniques that transform WiFi networks and offer the speeds and reliability once thought only possible over the wire. Best of all, the C-130 offers this best-in-class performance at a similar cost of competitive 802.11ac Wave 1 and Wave 2 access points.

Mojo Cloud Managed WiFi

The C-130 is managed by the Mojo cloud managed platform and leverages a purpose-built cloud architecture to produce enterprise-grade wireless networks for every application required, ensuring 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
- 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 C-130 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 by dedicated 2x2 third radio of all 802.11 channels increases insight and data about surrounding environment to 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 C-130 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 with dedicated third radio
- Mojo's patented Marker Packets™ are used to accurately detect access points on any network with the fewest false positives in the industry
- Third radio used as a dedicated security sensor for 24x7x365 scanning and automated over-the-air (OTA) prevention
- 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 unauthorized clients off 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 C-130 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

Front View

Property	Specification	
Physical Dimensions	220mm X 220mm X 57mm	
Weight	1.3kg (2.86 lb)	
Operating Temperature	0°C – 40°C (32°F – 104°F)	
Storage Temperature	-25°C – 75°C (-13°F – 167°F)	
Humidity	0-95% non-condensing	
Max power consumption	21.5W (802.3at)	14.5 (802.3af)
	19.5 (DC plug)	8W (idle)
Chipset	Qualcomm QCA9994	
Processor and RAM	Qualcomm IPQ8064 1.4GHz dual core ARM processor with 256 MB RAM and 128 MB Flash	

Technical Specifications

Physical Specifications	
Antenna	Internal PIFA x10
Ethernet Ports	2 Gigabit Ethernet ports with RJ45 connector type. One port 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 802.3at Power over Ethernet (PoE+) standard/802.3af Power over Ethernet(PoE). Using PoE results in limited feature functionality of the AP. Second port can be used for aggregation or wired extension of an SSID
USB	1 USB 2.0 port
Reset	Pinhole push button
Console	RS - 232 Serial
LEDs	Ethernet, 2.4Ghz, 5GHz, Scanning
Operational Specifications	
Input Power	12V DC (6.3mm connector)/802.3af (PoE)/802.3at (PoE+)
Number of Radios	3 radios; One 2.4GHz and 5GHz radio each for simultaneous dual band client access. Dual band 2x2 third radio for smart scanning, for both WIPS and RF Optimization
MIMO	4 X 4 for 2.4/5GHz Radios, 2 X 2 for Scanning Radio
Number of Spatial Streams	4 for 2.4/5GHz Radios, 2 for Scanning Radio
RF Transmit Power	27dBm per radio (max); Actual power for Tx will depend on Country Regulatory Domain
80+80MHz Non-Contiguous Channel Bonding	Yes
Simultaneous MU-MIMO Clients	64
Users in a MU-MIMO group with a 2x2 client	3
Bandwidth Agility	Yes
Small Cells Interference Mitigation (picocells, femtocells, microcells)	Supported
Frequency Bands	2.4-2.4835 GHz, 4.9-5.0GHz, 5.15-5.25 GHz; (UNII-1), 5.25-5.35 GHz, 5.47-5.6 GHz, 5.650-5.725 GHz (UNII-2), 5.725-5.85 GHz (UNII-3)
Dynamic Frequency Selection	Supported in compliance to all latest amendments from FCC, CE, IC, CB, TELEC, KCC regarding certifications.

Wi-Fi Specifications

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~ 5.825 GHz	5.15 ~ 5.25 GHz 5.25 ~ 5.35 GHz 5.47~ 5.725 GHz
Dynamic Frequency Selection	DFS and DFS2		
Modulation Type	OFDM		
Peak Data Rates	Up to 1.7 Gbps (MCS 0-31)		
Antenna	Integrated modular high efficiency PIFA antenna x8 (x4 per band)		

IEEE 802.11b/g/n			
Frequency Band	Scanning	Transmission	
	All regions	USA & Canada (FCC/IC)	Europe (ETSI)
	2400 ~ 2483.5 MHz	2400 ~ 2473.5 MHz	2400 ~ 2483.5 MHz
Modulation Type	DSSS, OFDM		
Peak Data Rates	Up to 800 Mbps (MCS 0-31)		
Antenna	Integrated modular high efficiency PIFA antenna x8 (x4 per band)		

Maximum Aggregate Transmit Power

For 5GHz

MCS Index	Transmit Power(dBm)
802.11a (legacy)	
6Mbps	27
36Mbps	25
48Mbps	24
54Mbps	24
802.11n HT20 (legacy)	
MCS 0,1,8,9,16,17, 24,25	27
MCS 2,3,10,11,18,19,26,27	26
MCS 4, 5, 12, 13, 20, 21, 28, 29	25
MCS 6, 14, 22, 30	24
MCS 7, 15, 23, 31	23
802.11n HT40	
MCS 0,1,8,9,16,17,24,25	25
MCS 2,3,10,11,18,19,26,27	24
MCS 4,5,12,13,20,21,28,29	23
MCS 6,7,14,15,22,23,30,31	22
802.11ac 256QAM VHT80	
3/4 Code Rate	21
5/6 Code Rate	20

For 2.4GHz

MCS Index	Transmit Power(dBm)
802.11b (legacy)	
1Mbps - 11Mbps	27
802.11g (legacy)	
6Mbps	27
54Mbps	24
802.11n HT20 (legacy)	
MCS 0,1,8,9,16,17, 24,25	27
MCS 2,3,10,11,18,19,26,27	26
MCS 4, 5, 12, 13, 20, 21, 28, 29	25
MCS 6, 14, 22, 30	24
MCS 7, 15, 23, 31	23
802.11n HT40	
MCS 0,1,8,9,16,17,24,25	25
MCS 2,3,10,11,18,19,26,27	24
MCS 4,5,12,13,20,21,28,29	23
MCS 6,7,14,15,22,23,30,31	22

Receive Sensitivity

For 5GHz

MCS Index	Receive Sensitivity
802.11a (legacy)	
6Mbps	-91
36Mbps	-78
48Mbps	-75
54Mbps	-73
802.11n HT20 (legacy)	
MCS 0,8	-91
MCS 1,9	-88
MCS 2,10	-85
MCS 3,11	-81
MCS 4,12	-77
MCS 5,13	-74
MCS 6,14	-72
MCS 7,15	-71
802.11n HT40	
MCS 0,8	-87
MCS 1,9	-85
MCS 2 ,10	-82
MCS 3,11	-78
MCS 4,12	-74
MCS 5,13	-70
MCS 6,14	-69
MCS 7,15	-68
802.11ac 256QAM VHT80	
MCS 0	-84
MCS 1	-82
MCS 2	-79
MCS 3	-75
MCS 4	-71
MCS 5	-67
MCS 6	-66
MCS 7	-65
MCS 8	-60
MCS 9	-58

For 2.4GHz

MCS Index	Receive Sensitivity
802.11b	
1Mbps	-94
11Mbps	-86
802.11g	
6Mbps	-90
24Mbps	-81
36Mbps	-78
48Mbps	-74
54Mbps	-73
802.11n HT20	
MCS 0,8	-90
MCS 1,9	-87
MCS 2,10	-84
MCS 3,11	-80
MCS 4,12	-77
MCS 5,13	-73
MCS 6,14	-71
MCS 7,15	-69
802.11n HT40	
MCS 0,8	-86
MCS 1,9	-84
MCS 2,10	-81
MCS 3,11	-77
MCS 4,12	-74
MCS 5,13	-70
MCS 6,14	-68
MCS 7,15	-66

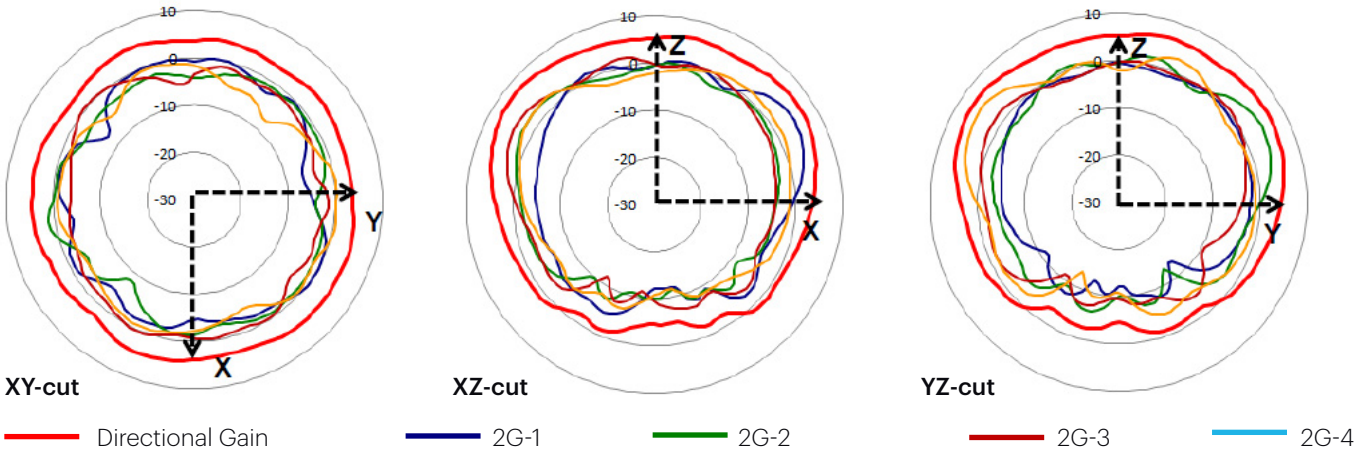
Country-Wise Max Transmit Powers (dBm)

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

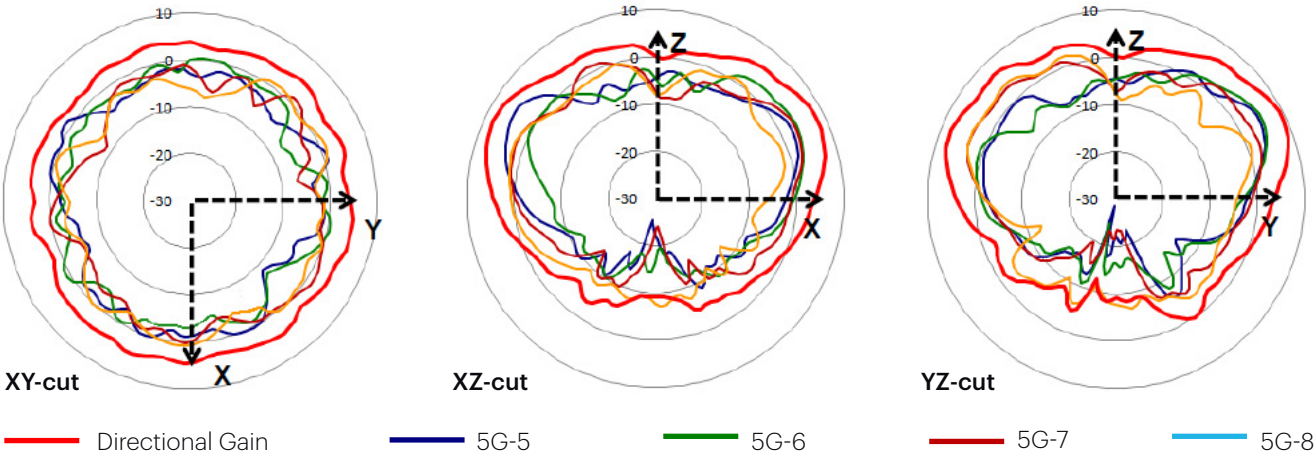
Note:
The actual transmit power will be the lowest of:

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

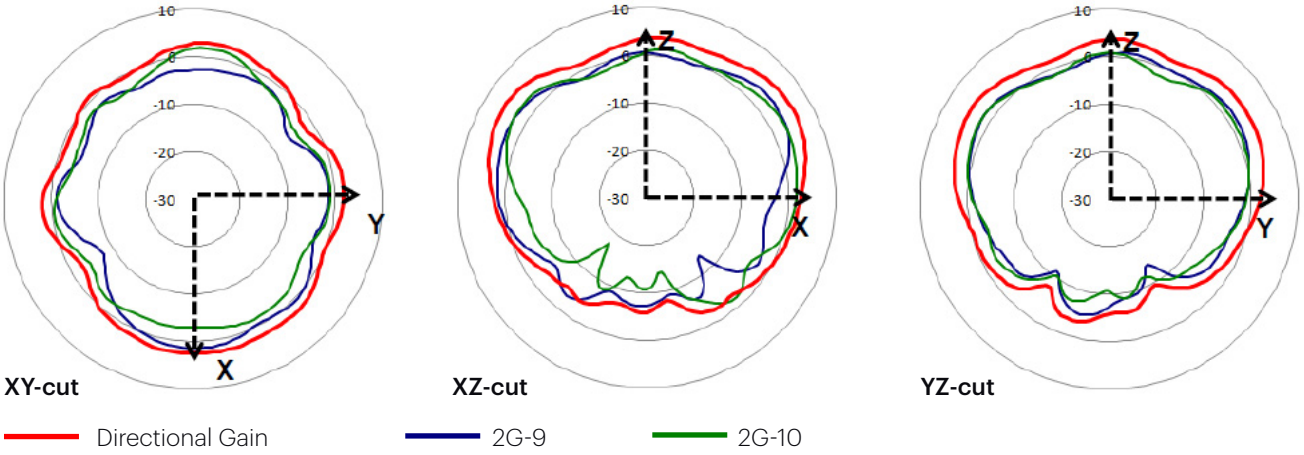
Radiation Pattern for 2G antennas (Ant 1,2,3,4)



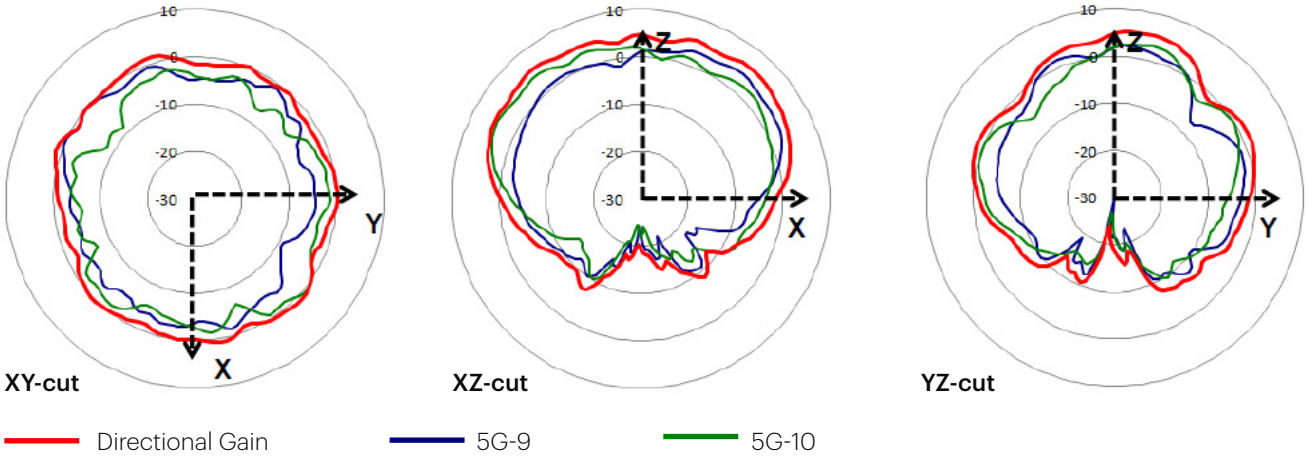
Radiation Pattern for 5G antennas(Ant 5,6,7,8)



Radiation Pattern for 2G antennas (Ant 9,10)



Radiation Pattern for 5G antennas(Ant 9,10)



About Mojo Networks, Inc.

Mojo Networks is redefining the modern enterprise WiFi infrastructure with a highly automated, extensible, secure WiFi software architecture that powers Fortune 500s, Global 2000s and the highest levels of government. With the scalability to set up thousands of access points securely with a few clicks from a smartphone or tablet and the cost-savings of an enterprise cloud-first solution without overpriced proprietary hardware, Mojo Networks is changing the industry to the new era of prolific WiFi connectivity.

Learn more about and request a free trial of Mojo Networks today at www.mojonetworks.com.

Mojo Networks, Inc. 339 N. Bernardo Avenue #200, Mountain View, CA 94043
T +1.877.424.7844 T 650.961.1111 F 650.961.1169 **www.mojonetworks.com** **info@mojonetworks.com**