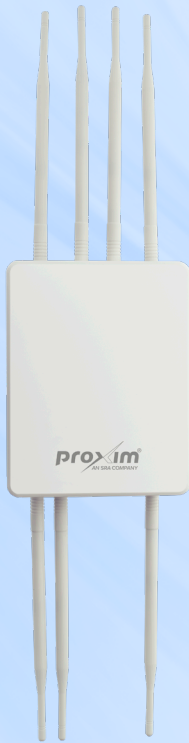# ORiNOCO® AP-9200R

Product Snaphot

The ORiNOCO® AP-9200R is an IP67 Rated outdoor 802.11ac wave2 Access Point.

The ORiNOCO® AP-9200R features one 5 GHz MU-MIMO 4×4:4 and one 2.4 GHz MIMO 3×3:3 radio delivering up to 2 Gbps aggregate data rate.

Ideally suited to industrial and outdoor hotspot applications, the AP-9200R delivers the same proven Proxim reliability.

- Dual radio rates of 1733 + 450 Mbps

- Up to 27 dBm (4 RF) at 5 GHz and up to 26 dBm (3RF) at 2.4 GHz

- Public HotSpot integration with Home Page redirect and Walled Garden

- HotSpot 2.0 to automatically discover and authenticate in public WiFi applications

- Multi-SSID with VLAN allocation, plus Ethernet port access and trunk mode

- 802.11e QoS

Easy to Deploy

The AP9200R is a FIT APTM compliant access point that can operate as a standalone AP or in a centrally controlled distributed wireless network using the ProximVision® Advanced hybrid controller.

Rugged Reliability

The ORiNOCO® AP-9200R is designed for harsh environments, and is fully IP67 rated and will deliver years of reliable service in conditions that include, high winds, high salt, and high-temperature extremes.

Secure

The ORiNOCO® AP-9200R provides enterprise-class security that features:
- 802.11i based security with AES 128 encryption and 802.1 x Radius based authentication
- Rogue AP scanning and detection
- Secure management (SSL/TLS1.2, SSH and SNMPv3).

Smartphone Configurator

Proxim's BlueConnect mobile app enables fast and efficient setup, monitoring, and troubleshooting.

Specifications

PRODUCT MODELS

AP-9200R-WD	ORiNOCO® AP-9200R, MU-MIMO 4x4 w2, dual radio, connectorized outdoor Access Point	PN: 903-00036

INTERFACES

WIRED ETHERNET	One auto MDI-X RJ45 10/100/1000Mbps Ethernet	
WIRELESS PROTOCOL	Radio #1: 802.11a/n/ac w2	Radio #2: 802.11b/g/n

RADIO & TX SPECS

	Radio #1			Radio #2		
FREQUENCY	5.150 – 5.925 GHz (Subject to Country Regulations)			2.400 – 2.484 (Subject to Country Regulations)		
	802.11ac	802.11n	802.11a	802.11n	802.11g	802.11b
MIMO	4x4:4	4x4:4	N/A	3x3:3	N/A	N/A
MODULATION	OFDM BPSK-QAM256	OFDM BPSK-QAM64	OFDM BPSK-QAM64	OFDM BPSK-QAM64	OFDM BPSK-QAM64	DSSS DBPSK-CCK
DATA RATE	Upto 1733 Mbps	Upto 600 Mbps	Upto 54Mbps	Upto 450 Mbps	Upto 54 Mbps	Upto 11 Mbps

	80 MHz	40 MHz	20 MHz	40 MHz	20 MHz	20 MHz	40 MHz	20 MHz	20 MHz	20 MHz
TX POWER	MCS0: 18	MCS0: 20	MCS0: 21	MCS0: 20	MCS0: 21	6 Mbps: 21	MCS0: 20	MCS0: 21	6 Mbps: 21	1 Mbps: 21
	MCS9: 14	MCS9: 15	MCS8: 16	MCS7: 16	MCS7: 17	54 Mbps: 19	MCS7: 117	MCS7: 18	54 Mbps: 18	11 Mbps: 20
RX SENSITIVITY (Per=10^{-6})	MCS0: -84	MCS0: -86	MCS0: -89	MCS0: -86	MCS0: -89	6 Mbps: -86	MCS0: -88	MCS0: -91	6 Mbps: -91	1 Mbps: -93
	MCS9: -59	MCS9: -62	MCS8: -67	MCS7: -67	MCS7: -72	54 Mbps: -72	MCS7: -69	MCS7: -72	54 Mbps: -74	11 Mbps: -89
OTHER	Auto Channel Selection (ACS) Dynamic Frequency Selection (DFS) based on radar signature					Auto Channel Selection (ACS)				

THROUGHPUT

	Radio #1	Radio #2
	Up to 810 Mbps	Up to 190 Mbps

SECURITY

AUTHENTICATION	Enterprise/802.1x, Personal/ PSK (Pre Shared Key) or Open plus Internal MAC Address Control List
802.1X SUPPORT	PEAP, LEAP, EAP-TLS, EAP-TTLS, EAP-SIM, EAP-AKA, EAP-FAST
ENCRYPTION	802.11i/WPA2 and WPA Wireless Security with AES-128, TKIP or WEP

WIRELESS

AP-AP COMMUNICATION	WDS with STP loop avoidance
RF ENVIRONMENT	Spectrum analyzer
OTHER	802.11h Spectrum and Transmit Power Management Extensions

QoS

PACKET CLASSIFICATION	802.11e/WMM Enhanced Distributed Channel Access, 4 priority queues 802.1p priority, IPTOS

HOTSPOT

Home Page Redirect with configurable URL and Domain based Walled Garden with wild card support Hotspot 2.0

MANAGEMENT

REMOTE	Telnet and SSH, Web GUI and SSL/TLS1.2, TFTP, SNMPv3
SNMP	SNMP v1-v2c-v3, RFC-1213, RFC-1215, RFC-2790, RFC-2571, RFC-3412, RFC-3414, Private MIB
OTHER	802.11d / 802.11h Spectrum and Regulatory Features

ANTENNA

Radio #1	Radio #2
Four RP-SMA Connectors	Three RP-SMA Connectors
Four 7 dBi, omni-directional antenna provided	Three 7 dBi, omni-directional antenna provided

NETWORK

IP STACK	IPv4 and IPv6 simultaneously
VLAN	802.1Q: Management VLAN. Transparent, Access and Trunk mode. Radius based VLAN assignment

POWER

802.3af/at Compliant

POWER CONSUMPTION

27 W typical, 30 W max

ENVIRONMENTAL SPECS	OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY - IP RATING	WIND LOADING
	-30° to 55° Celsius (-22° to 131° Fahrenheit)	-50° to 70° Celsius (-58° to 158° Fahrenheit)	100% relative humidity–IP67	180 km/h (112.5 mph)
PHYSICAL SPECS	DIMENSIONS PACKAGED	DIMENSIONS NPACKAGED	WEIGHT (PACKAGED)	WEIGHT (UNPACKAGED)
MP-1025-BS3/CPE	310 x 226 x 98 mm (12.2 x 8.9 x 3.85 in)	170 x 217 x 56 mm (6.7 x 8.55 x 2.2 in)	3.00 kg (6.61 lbs)	1.20 kg (2.65 lbs)

SAFETY STANDARDS

IEC 62368-1:2016 & 60950-22:2016

CAN/CSA C22.2 No 62368-1:14 & No 60950-22:17

EN 62368-1:2014 + A11:2017 & 60950-22:2017

CERTIFICATIONS

USA	FCC part 15B class B (EMC), part 15C (Bluetooth + 2.4 GHz radio) and part 15E (5 GHz radio)
CANADA	RSS-247 issue 2, RSS-102 issue 5, ICES-003 issue 7
EUROPE	RRED EN 301 489-1 + EN 301 489-17 + EN 300 328 + EN 301 893 + EN 302 502

PACKAGE CONTENTS

- One ORiNOCO® AP-9200R with seven RP-SMA connectors
- Four 5 GHz, 7 dBi omni antennas
- Three 2.4 GHz, 7 dBi omni antennas
- One M25 weather proofing cable gland
- One power injector and country specific power cord
- One full axis mounting kit
- One Grounding kit
- One Quick Installation Guide

MTBF & WARRANTY

>250 000 hours, 2-year warranty, ServPak Extended Support available.

ABOUT PROXIM WIRELESS:

Proxim Wireless is a global leader in advanced wireless broadband and WiFi solutions that deliver high performance and high availability communications. Celebrating 40 years of pioneering wireless solutions, Proxim is recognized for unparalleled reliability, superior performance, and drive for innovation.