

# ORiNOCO® AP-9100

## Enterprise-class 802.11ac Access Point



### Proxim introduces the all new ORiNOCO® AP-9100, combining compact design with breakthrough speeds of 1.3 Gbps and incredible flexibility

ORiNOCO® AP-9100 is a high performance, very reliable, 802.11ac access point with up to 24.8 dBm triple chain transmit power. It features incredible MIMO 3x3:3 performance of 1750 Mbps aggregate data rate and unparalleled flexibility. In addition, Proxim's new access point takes advantage of the ergonomics and cutting edge design of its predecessor, simplifying installation and migration. Organizations of all sizes encompassing Small and Medium Enterprises, Health Care, Governments and Public safety departments, can achieve higher performance than their existing wired and wireless LANs while avoiding High OPEX and CAPEX, deployment challenges and additional network planning. The primary advantages of 802.11ac compliant products are significantly higher throughput and longer range.

#### High Performance

ORiNOCO® AP-9100 products enable enterprises of all size to finally unwire the wired LAN by providing greater performance than existing Ethernet networks

- High throughput with dual radio rates of 450 + 1300Mbps
- No need to run new cable to add stations to a LAN
- Three times the throughput of existing typical WLANs
- High reliability for quad play applications

#### Highly Secure

ORiNOCO® AP-9100 provide enterprise class security to ensure full protection of sensitive information

- 802.11i based security with AES 128 encryption and 802.1x radius based authentication
- Rogue scan listing surrounding devices
- Secure management (SSL, SSH and SNMPv3) preventing unwanted configuration changes
- Kensington lock protecting against product theft
- Fire resistant enclosure matching plenum installation requirement

#### Unparalleled Flexibility and Convenience with Centralized Management

ProximVision Network Management System supports ORiNOCO® AP-9100 giving network architects unparalleled flexibility and control of the units

- Rapid Network Deployment: ProximVision NMS automates configuration processes for faster, more efficient deployment of Proxim Wireless networks
- Mobile Configuration Capabilities: ProximVision NMS gives network managers a mobile option for exhaustive device configuration with a software-based tool
- Greater Ease of Use and Upgradability: ProximVision NMS can support a greater number of APs than competitively priced solutions and provides the simplest path to configuration and upgrade

#### Standalone and Controller-Ready

ORiNOCO®AP-9100 offers advantage of both architectures

- Standalone operation, leveraging PVNMS supervision.
- If controller architecture is desired, AP-9100 is designed to integrate into the Proxim Controller to be released late this year

#### Cost Effective

ORiNOCO® AP-9100 solution drastically reduces the cost of WLAN deployments

- With twice the range and added throughput, AP-9100 setups now cost only a fraction of today's 802.11n networks when deployed to achieve the same capacity
- AP-9100 simplifies installation by ensuring enhanced signal strength to hard-to-reach clients
- AP-9100 utilize a very convenient mounting hardware enabling simple swap out of old Proxim AP's and making upgrades a snap

**PRODUCT MODELS**

AP-9100 ORINOCO AP-9100, MIMO 3x3, 802.11 ac + b/g/n dual radio Access Point

**INTERFACES**

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

RADIO	Radio #1					Radio #2				
	FREQUENCY	5.150 – 5.350, 5.470 – 5.850 GHz (Subject to Country Regulations)					2.400 – 2.484 (Subject to Country Regulations)			
MIMO	802.11ac		802.11n		802.11a	802.11n		802.11g		802.11b
MODULATION	3x3		3x3		N/A	3x3		N/A		N/A
DATA RATE	OFDM BPSK-QAM256		OFDM BPSK-QAM64		OFDM BPSK-QAM64	OFDM BPSK - QAM64		OFDM BPSK-QAM64		DSSS DBPSK-CCK
TX POWER	Upto 1300Mbps		Upto 450Mbps		Upto 54Mbps	Upto 450Mbps		Upto 54Mbps		Upto 11Mbps
	80 MHz	40 MHz	20 MHz	40 MHz	20 MHz	20 MHz	40 MHz	20 MHz	20 MHz	20 MHz
RX SENSITIVITY (BER=10 <sup>-6</sup> )	MCS0: 20	MCS0: 20	MCS0: 20	MCS0: 20	MCS0: 20	6 Mbps: 20	MCS0: 17	MCS0: 18	6 Mbps: 19	1 Mbps: 19
	MCS9: 15	MCS9: 15	MCS8: 17	MCS7: 19	MCS7: 19	54 Mbps: 19	MCS7: 14	MCS7: 15	54 Mbps: 16	11 Mbps: 19
	MCS0: -87	MCS0: -90	MCS0: -92	MCS0: -91	MCS0: -92	6 Mbps: -92	MCS0: -88	MCS0: -91	6 Mbps: -90	1 Mbps: -95
	MCS9: -60	MCS9: -63	MCS8: -67	MCS7: -71	MCS7: -73	54 Mbps: -75	MCS7: -72	MCS7: -73	54 Mbps: -76	11 Mbps: -90

ANTENNA	Radio #1	Radio #2
	Three integrated PIFA antennas: 5 dBi	Three integrated PIFA antennas: 4.5 dBi

**MANAGEMENT**

REMOTE Telnet and SSH, Web GUI and SSL, TFTP, SNMP v1, v2c and v3  
 OTHER Syslog, and SNTP

**NETWORK**

DHCP Client and Server  
 VLAN 802.1Q: Management VLAN. Transparent, Access and Trunk mode. Radius based VLAN assignment

**WIRELESS**

AP-AP COMMUNICATION WDS with STP loop avoidance  
 RF ENVIRONMENT Rogue Scan  
 OTHER 802.11h Spectrum and Transmit Power Management Extensions  
 802.11k Radio Resource Measurement

**QOS**

802.11e Enhanced Distributed Channel Access

**SECURITY**

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

THROUGHPUT	Radio #1	Radio #2
	Upto 650 Mbps	Upto 225Mbps

**POWER**

POWER OVER ETHERNET 802.3af/at compliant  
 POWER ADAPTER 110/220 V AC - 50/60 Hz (input), 12 V DC - 1.25 A (output)  
 CONSUMPTION <12.9 Watt typical

**ENVIRONMENTAL SPECS**

OPERATING TEMPERATURE 0° to 40°C (32° to 104° Fahrenheit)  
 STORAGE TEMPERATURE -20° to 60°C (-4° to 140° Fahrenheit)  
 HUMIDITY - IP RATING 5 - 90% relative humidity

**SURGE PROTECTION**

ELECTRO STATIC DISCHARGE Conductive : 4 kV Air : 8 kV  
 SURGE CAPACITY Line to Line : 0.5 kV Line to Earth 1 kV (EN 61000-4-5)

PHYSICAL SPECS	DIMENSIONS	WEIGHT
PACKAGED	13.2 x 8.45 x 2.16 in. (335 x 215 x 55 mm)	1.75 lbs (790 g)
UNPACKAGED	6.69 x 6.69 x 1.74 in. (170 x 170 x 44.1 mm)	0.75 lbs (340 g)

**SAFETY STANDARDS**

UL 60950, CAN/CSA-C22.2 No. 60950, IEC 60950, EN 60950 (part -1 and -2)  
 Plenum rated (ATX 200 material)

**PACKAGE CONTENTS**

- One ORINOCO® AP-9100
- One Wall / Ceiling mounting kit
- One power adapter
- One Quick Installation Guide

**MTBF**

Over 500k hours

**WARRANTY**

1-year on parts and labor; ServPak Extended Support available