

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 data rates of 1300 + 450 Mbps
- 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® Advanced supports ORiNOCO® AP-9100 giving network architects unparalleled flexibility and control of the units

- Rapid Network Deployment: ProximVision® Advanced automates configuration processes for faster, more efficient deployment of Proxim Wireless networks
- Advanced Configuration Capabilities: ProximVision® Advanced gives network managers an option for exhaustive device configuration with a software-based tool
- Greater Ease of Use and Upgradability: ProximVision® Advanced 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 ProximVision® Advanced supervision.
- If controller architecture is desired, AP-9100 is designed to integrate into the Proxim Controller to be released later 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, thanks to its three RF chain
- 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 10/100/1000 Mbps 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 ⁻⁶) | 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.

WIRELESS

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

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

TCP THROUGHPUT

| Radio #1 | Radio #2 |
|---------------|---------------|
| Upto 670 Mbps | Upto 310 Mbps |

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 -22)
 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