Performance Matters. Proxim Delivers.®

ORiNOCO® AP-8100

802.11n Access Points

Proxim introduces dual 802.11n radio ORiNOCO® AP-8100, combining compact design with breakthrough speeds of 300 Mbps and incredible flexibility.

ORiNOCO® AP-8100 is a high performance, very reliable 2x2 MIMO access point with 20 dBm dual-chain aggregate Transmission power. It features incredible performance of 300 Mbps aggregate throughput and unparalleled flexibility. In addition, Proxim's new 802.11n access point has been developed by combining ergonomics and cutting edge design that simplifies installation and deployment.

Organizations of all sizes encompassing Small and Medium Enterprises, Health Care, Governments and Public safety departments, can achieve higher perfor-mance than their existing wired and wireless LANs while avoiding High OPEX and CAPEX, deployment challenges and additional network planning. The primary advantages of 802.11n compliant products are significantly higher throughput and longer range.

High Performance

Proxim's ORiNOCO® AP-8100 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 300+300Mbps
- No need to run new cable to add stations to a LAN
- 7x the throughput of existing typical WLANs
- High reliability for quad play applications

Unparalleled Flexibility and Convenience with

Centralized Management

ProximVision® Advanced supports ORiNOCO® AP-8100 giving network architects unparalleled flexibility.

- Rapid Network Deployment – ProximVision® Advanced automates configuration processes for faster, more efficient deployment of Proxim Wireless networks
- Mobile Configuration Capabilities – ProximVision® Advanced gives network managers a mobile 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

Highly Secure

Proxim's ORiNOCO® AP-8100 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 device scan providing list of devices surrounding AP-8100
- Secure management (https/SSL, telnet/SSH and SNMPv3) preventing unwanted configuration change
- Kensington Lock protecting against product theft
- Fire resistant enclosure matching plenum installation requirement

Cost Effective

Proxim's ORiNOCO® AP-8100 solution drastically reduces the cost of WLAN deployments

- With the added range and throughput, deployments now cost only a fraction of today's 802.11a/b/g networks when deployed to achieve the same capacity
- AP-8100 provides two times the range of standard 802.11a/b/g APs ensuring enhanced signal strength to hard-to-reach clients in the office, which simplifies deployment

Reduced Cost of Upgrading

Proxim's ORiNOCO® AP-8100 overcomes the deployment challenges and the associated costs of competitive 802.11n products by eliminating the need for forklift upgrades, additional wiring, or additional network planning

- Because Proxim does not require costly WLAN controllers, AP-8100 networks can cost effectively scale to meet increasing bandwidth demands in the future
- ORiNOCO 802.11n APs are the only APs in the market that are completely 802.3af compliant in all configurations, which avoids the cost of additional wiring or power injectors as required by 802.3at compliant APs
- 8100 APs utilize a very convenient mounting hardware enabling simple swap out of old APs and making upgrades a snap

PRODUCT MODELS

ORiNOCO AP-8100	ORiNOCO® AP-8100, MIMO 2x2, 802.11 a/n + b/g/n dual radio Access Point

INTERFACES

WIRED ETHERNET	One auto MDI-X RJ45 10/100/1000Mbps Ethernet
WIRELESS PROTOCOL	One 802.11b/g/n radio, One 802.11a/n radio

RADIO & TX SPECS

		Radio 1 (802.11b/g/n)		Radio 2 (802.11a/n)	
MIMO	2x2 MIMO				
MODULATION		OFDM with BPSK, QPSK, QAM16 and QAM64 / DSSS			
FREQUENCY		2.400 – 2.484 GHz		5.150 – 5.850 GHz	
		(Subject to Country Regulations)			
CHANNEL SIZE		40 MHz and 20 MHz channel bandwidths			
DATA RATE		6.5 – 300 Mbps for 802.11n mode (MCS 0 to 15), 6 – 54 Mbps for 802.11a/g mode (BPSK, QPSK, 16-QAM and 64-QAM), 1 – 11 Mbps for 802.11b mode (DBPSK, DQPSK and CCK)			
TX POWER		Up to 17 dBm (single Tx chain), Up to 20 dBm (two Tx Chain)			
				Up to 15 dBm (two Tx chain) under FCC 5.4 – 5.7 GHz	
TX POWER CONTROL		0 – 22 dB, in 1 dB steps			
RX SENSITIVITY (BER=10^{-6})		802.11b	802.11g		802.11a
	BPSK	-93 dBm	-90 dBm		-90 dBm
	CCK or 64QAM	-90 dBm	-75 dBm		-75 dBm
		802.11n 40MHz	802.11n 20MHz	802.11n 40MHz	802.11n 20MHz
	MCS 0/8	-86 dBm	-87 dBm	-86 dBm	-87 dBm
	MCS 7/15	-66 dBm	-70 dBm	-66 dBm	-70 dBm

ANTENNA

	PIFA High Efficiency	3 dBi peak	4 dBi peak

MANAGEMENT

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

SECURITY

ENCRYPTION	WEP, TKIP and AES, based on 802.11i standard
AUTHENTICATION	Internal MAC Address Control List, Pre-Shared Key and 802.1x (Radius based)

WIRELESS

AP-AP COMMUNICATION	WDS with STP loop avoidance
RF ENVIRONMENT	Rogue Scans

NETWORK

DHCP	Client and Server
QoS	Wireless Multimedia Extensions, based on 802.11e EDCA standard
VLAN	802.1Q: Management VLAN. Transparent, Access and Trunk mode. Radius based VLAN assignment

ELECTRICAL

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	7 Watt average, 12 Watt peak

ENVIRONMENTAL SPECS

OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY
0° to 45°C (32° to 113° Fahrenheit)	-40° to 70°C (-40° to 158° Fahrenheit)	5 to 95 % relative humidity (non-condensing)

PHYSICAL SPECS

DIMENSIONS (PACKAGED)	DIMENSIONS (UNPACKAGED)	WEIGHT (PACKAGED)	WEIGHT (UNPACKAGED)
13x8.5x2.17 in (300x216x55 mm)	6.69 x 6.69 x 1.74 in. (170 x 170 x 44.1 mm)	1.7 lbs (0.770 kg)	0.75 lbs (0.340 kg)

SAFETY STANDARDS

UL 60950-1, plenum rated (ATX 200 material)

PACKAGE CONTENTS

- One ORiNOCO® AP-8100 unit
- One power adapter
- One Wall/Ceiling mounting kit
- One Quick Installation Guide

MTBF & WARRANTY

Over 100k Hours

WARRANTY

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