ORiNOCO AP-4000
Tri-Mode Access Point

Delivers Scalability for Evolving Wireless LAN Networks

The ORiNOCO AP-4000 Access Point is Proxim's highest performance wireless LAN solution. The AP-4000 is memory-rich and pre-configured with tri-mode for automatic support of all client types – perfect for evolving enterprise wireless networks.

- Automatic, universal Wi-Fi client interoperability
- 40 Mbps throughput with 802.11g and 802.11a simultaneous operation
- Built-in rogue AP detection for both 802.11b/g and 802.11a access points
- AP-to-AP communication for reaching areas without Ethernet wiring
- Unique 802.11a scalability - external antenna connector for increased transmit distance
- Twice the memory of competing APs, ensuring software upgrade capacity

Secure, Multi-use Wi-Fi Network

The ORiNOCO AP-4000 includes support for multiple security settings with a VLAN in addition to existing standards-based security.

- Multiple security settings per VLAN, with up to 16 VLANs per radio
- Security settings for multiple groups – so employees, guests and contractors now easily, securely share the same infrastructure

Proactive Security Measures to Protect Your Network

ORiNOCO access points support the latest security standards, such as Wi-Fi Protected Access (WPA), and add proactive security measures.

- Certified WPA for IEEE 802.1X mutual authentication
- Dynamic per-user, per-session rotating keys

- Rogue access point detection, notification
- Fully software upgradeable to AES and 802.11i
- Intra-cell blocking to prevent client-to-client snooping

Easy to Deploy and Manage

Ease of deployment and integration with the wired network are critical factors in a successful, profitable wireless LAN rollout. ORiNOCO access points excel with key capabilities that simplify WLAN deployment.

- Tools to speed installation and optimization: automatic channel selection, adjustable transmit power, external antenna connectors
- Wireless repeating functionality for areas without Ethernet wiring
- Remote, secure management via SNMPv3 and HTTPS (SSL)
- Extensive RADIUS accounting support
- Powerful group configuration, software updates and automatic alerts via Wavelink Mobile Manager
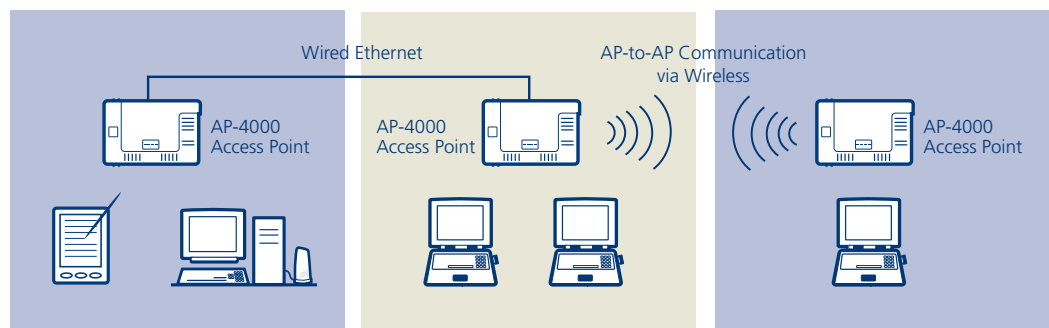
Reliable by Design

With over 10 years of experience in the design and manufacture of wireless LANs, Proxim understands that service providers and enterprises require the same uptime and reliability in a wireless network as in a wired network. ORiNOCO access points offer:

- Robust features for enterprise, public access – compared to consumer grade APs
- Automatic reconfiguration of network parameters and security policy in the event of power loss
- Assured software upgrade – for rollback in the event of software or configuration change problems
- IEEE 802.3af Power-over-Ethernet, plenum rating, integrated antennas and external antenna connectors

APPLICATIONS

- **Enterprise**
  Mobile user productivity
- **Healthcare**
  Real-time patient charting
- **Education**
  Mobile faculty and student connectivity
- **Government**
  Remote access to constituency information
- **Public Hot Spots**
  Wi-Fi connectivity

Wired Ethernet

AP-to-AP Communication via Wireless

AP-4000 Access Point

AP-4000 Access Point

AP-4000 Access Point

ORiNOCO AP-4000 Specifications

ADDITIONAL FEATURES

Tri-mode 802.11b, 802.11g and 802.11a support	Pre-configured, simultaneous 802.11b, 802.11g and 802.11a support
Field upgradeable	Software upgradeable to support new standards
Wi-Fi Protected Access (WPA) including 802.1X and dynamic TKIP encryption	Highest authentication and encryption methods including mutual authentication, message integrity check (MIC), per-packet keys initialization vector hashing and broadcast key rotation
Software upgradeable to AES and 802.11i	Investment protection for compatibility with next industry standard security specification
Rogue AP Detection	Detects, alerts and stops unauthorized rogue Access Points in both the 2.4 and 5 GHz bands[1]
Secure Management Interfaces	SNMPv3 and SSL protect against unauthorized AP changes via the management interface
Multiple VLAN Support with different security settings	Up to 16 separate VLANs per radio each able to support a different security setting
Auto configuration via DHCP	Ensures new APs automatically receive correct configuration and prevents security vulnerabilities with deliberate resets
Central management and configuration	Allows centralized management of AP settings including group updates of firmware[1]
Assured Software Upgrades	Guarantees new AP configuration file is valid before deleting current image - dual image support
Quality of Service	Allows simultaneous data and Voice over WLAN solutions from Spectralink[2]
Transmit Power Control	Supports settable transmit power levels to adjust coverage cell size
Automatic Channel Selection	Simplifies installation by choosing best possible channel upon installation
Designed for Public Access	Extensive RADIUS Accounting support as well as intra-cell blocking to prevent client-to-client snooping
AP-to-AP Communication	Allows extension of wireless LAN to areas without Ethernet wiring (parking lots, long corridors, etc) for 802.11b, 802.11g and 802.11a
Advanced Filtering Capabilities	IEEE 802.1d bridging with static MAC address filtering, network protocol filtering, roxy ARP, multicast/broadcast storm theshold filtering,TCP/UDP port filtering, intra-cell traffic filtering, and Spanning Tree support
Active Ethernet and AC Power	Decreases installation costs up to $1000 per AP when Power over Ethernet is available
Integrated diversity 2.4 and 5 GHz antennas with horizontal and vertical polarization	Delivers optimum coverage in any mounting position and excellent performance in high multipath environments
External antenna connectors for 802.11b/g and 802.11a	Allows use of shaped and higher gain antennas to design for most efficient AP placement[3]
Plenum rated	Meets safety and insurance requirements when installed in air spaces
Wi-Fi Certified	Industry certification guarantees interoperability with other Wi-Fi certified clients

INTERFACE

Wired Ethernet	10/100 base-T Ethernet (RJ-45)
Wireless Ethernet	1 integrated 802.11b/g radio and 1 integrated 802.11a radio
RS-232	Unit configuration

HARDWARE SPECIFICATION

Memory	32 MB SDRAM; 8 MB Flash

PHYSICAL SPECIFICATIONS

Dimensions	11.375 x 9.25 x 2.75 in (29 x 23.5 x 7 cm)
Weight	2.05 lbs (0.93 kg)

ENVIRONMENTAL SPECIFICATIONS

Temperature	Operating	0°C to 55°C
	Storage	-10°C to 70°C
Humidity	Operating	95% (non-condensing)
	Storage	95% (non-condensing)

POWER SUPPLY

Types	Integrated module Autosensing 100/240 VAC; 50/60 Hz IEEE 802.3af Active Ethernet for power over Ethernet

LEDS

Type:	Power, Ethernet LAN Activity Wireless 802.11b/g Activity Wireless 802.11a Activity

MANAGEMENT

- SNMPv1, SNMPv2c and secure SNMPv3 management
- Standard & ORiNOCO traps
- ORiNOCO MIB, Etherlike MIB, 802.11 MIB, Bridge MIB, MIB-II
- TFTP support
- Telnet CLI, Serial Port CLI (no proxy required)
- HTTPS (SSL) server for secure web-based management
- WaveLink Mobile Manager for group management (not included)
- Syslog
- DHCP Server and Client

WARRANTY

1 year (on parts and labor)

PACKAGE CONTENTS

- AP-4000 tri-mode access point with built-in 802.11b/g and 802.11a radios
- Power supply and support for Active Ethernet and IEEE 802.3af
- Software and documentation
- Cable cover and mounting bracket

RELATED PRODUCTS

ORiNOCO 11a/b/g ComboCard, Dual Band Range Extender Antenna

[1] In conjunction with Wavelink Mobile Manager
[2] Available Q204
[3] 8670-US2 does include external antenna connectors for 802.11a

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