ORiNOCO AP-2000
Tri-mode Access Point

Applications

- **Small, medium and large enterprises:**
mobile access to improve employee, contractor and customer efficiency

- **Universities:**
flexible, immediate, mobile faculty and student connectivity in dorms, classrooms, libraries and campus quads

- **Hospitals and medical clinics:**
real time information system wide for better patient care and reduced errors

- **Local, state and federal agencies:**
fast access to information to serve constituencies better

- **Large public hotspots:**
robust, secure, Wi-Fi connectivity for airports, convention centers, hotels

Tri-Mode Access Point Delivers High Capacity and Flexibility

The ORiNOCO AP-2000 access point combines enterprise-class security and management features with optional tri-mode (simultaneous 802.11a/b/g) operation for maximum client diversity, and dual radio support for optimal high-density subscriber usage.

- Upgradeable, dual-slot architecture for investment protection and flexibility

- High-speed 54 Mbps support for 802.11b, 802.11g and 802.11a in one platform

- Dual 802.11b or 802.11g radio configuration optimizes for high client density environments

Proactive Security Measures to Protect Your Network

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

- Certified WPA for IEEE 802.1X mutual authentication

- Dynamic per-user, per-session rotating keys

- Rogue access point detection, notification

- Secure management interfaces: SNMPv3 and SSL

- 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.
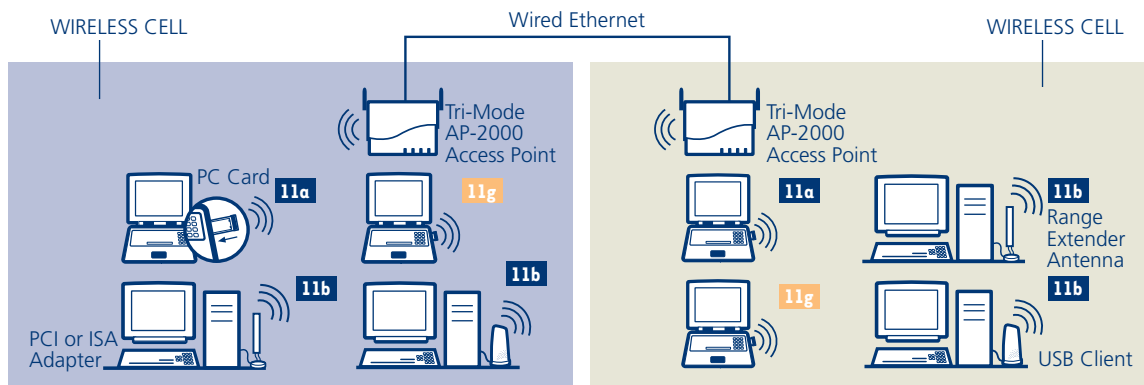
- Tools to speed installation and optimization: automatic channel selection, adjustable transmit power, external antenna connectors

- Wireless repeating functionality in areas without Ethernet wiring

- Remote management via SNMP, HTTP and Telnet

- 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 security policy in the event of power loss

- Dual firmware image support – for rollback in the event of software or configUration change problems

- IEEE 802.3af Power-over-Ethernet, plenum rating, built-in Kensington lock* and external antenna connectors*

*Not available on all models

WIRELESS CELL Wired Ethernet WIRELESS CELL

Tri-Mode AP-2000 Access Point

PC Card `11a` `11g`

`11b`

PCI or ISA Adapter

Tri-Mode AP-2000 Access Point

`11a` `11b` Range Extender Antenna

`11g` `11b` USB Client

Supporting 802.11b, 802.11g and 802.11a clients requires the AP-2000b/g and an AP-2000 11a Kit.

About Proxim

Proxim Corporation is a global leader in wireless networking equipment for Wi-Fi and broadband wireless networks. The company provides its enterprise and service provider customers with wireless solutions for the mobile enterprise, public hot spots, security and surveillance, last mile access, metropolitan area networks and voice and data backhaul.

ORiNOCO AP-2000 Specifications

ADDITIONAL FEATURES

Tri-mode 802.11b, 802.11g and 802.11a support	Simultaneous 802.11b, 802.11g and 802.11a support
Field upgradeable	Software and hardware 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[1]
Rogue AP Detection	Detects, alerts and stops unauthorized rogue Access Points[2]
Secure Management Interfaces	SNMPv3 and SSL protect against unauthorized AP changes via the management interface
Multiple VLAN Support	Up to 16 separate VLANs per radio
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[2]
Dual Image Support	Dual Image Support: Guarantees new AP configuration file is valid before deleting current image
Quality of Service	Allows simultaneous data and Voice over WLAN solutions from Spectralink
Load Balancing	Redirects 802.11b clients to less busy APs based on actual throughput[3]
Transmit Power Control	Supports settable transmit power levels to adjust coverage cell size[1]
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
Repeating (Wireless Distribution System)	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, Proxy ARP, multicast/broadcast storm threshold 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.
Diversity 2.4 and 5 GHz antennas	Delivers best performance in high multipath environments
External antenna connectors	Allows use of shaped and higher gain antennas to design for most efficient AP placement
Plenum rated	Meets safety and insurance requirements when installed into 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	2 CardBus slots for radio NIC
RS-232	Unit configuration

HARDWARE SPECIFICATION

Processor	Intel SA110 – 233MHz
Memory	16 MB SDRAM 8 MB Flash

PHYSICAL SPECIFICATIONS

Dimensions	50 mm x 185 mm x 261 mm (2.0 in. x 7.3 in. x 10.2 in.)
Weight	1.75 kg (3.86 lb.)

ENVIRONMENTAL SPECIFICATIONS

	Temperature	Humidity
Operating	0°C to 40°C	95% (non-condensing)
Storage	-10°C to 50°C	95% (non-condensing)

POWER SUPPLY

Types	• Integrated module • Autosensing 100/240 VAC; 50/60 Hz • IEEE 802.3af Active Ethernet for power over Ethernet (for the AP-2000 AE and the AP-2000b/g)
Voltage	0.2 A

MECHANICAL SPECIFICATION

- Modular design
- Plastic cover
- Metal mounting plate that allows for placement on a wall, ceiling or table

LEDS

4 LEDs:	Power Ethernet LAN Activity Wireless Activity Slot A Wireless Activity Slot B

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)
- Remote link test
- Syslog
- DHCP Server and Client

WARRANTY

1 year (on parts and labor)

PACKAGE CONTENTS

AP-2000:
- AP-2000 unit
- Power supply
- Software and documentation
- Radio must be ordered separately

AP-2000 AE:
- AP-2000 unit
- Support for Active Ethernet (NO power supply)
- Software and documentation
- Radio must be ordered separately

AP-2000b/g:
- AP-2000 unit with b/g radio
- Support for Active Ethernet
- Power supply
- Software and documentation

RELATED PRODUCTS

AP-2000 11b/g Kit, AP-200011a Kit, PC Card, Range Extender Antenna

[1] AP-2000b/g, AP-2000 using AP-2000 11b/g Kit, and AP-2000 using AP-2000 11a Kit
[2] In conjunction with Wavelink Mobile Manager
[3] For Agere-based 802.11b clients only

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