



Bay Area Compliance Laboratory Corporation

EC Identification number 1313

Authorized by the European Union to act as Conformity Assessment Body in accordance with the R&TTE Directive 1999/5/EC, 2003-03-09

CERTIFICATE EXPERT OPINION

Report-No.: S0410068

Certificate Holder: Proxim Corporation
935 Stewart Drive
Sunnyvale, CA 94085

Product Designation: AP-AG-AT-02 & 8670-XXX where XXX used to represent destination country SKU

Product Description: ORINOCO AP-4000 Tri-Mode Access Point

Product Manufacturer: UNIVERSAL SCIENTIFIC INDUSTRIAL CO., LTD.
141, Lane 351, Taiping Road, Sec. 1,
Tsao Tuen, Nan-Tou, Taiwan, R.O.C.

Essential requirements	Specifications / Standards	Submitted documents	Result
Radio spectrum (R&TTE, Article 3.2)	EN 300 328-1 V1.3.1 (2001-12) EN 300 328-2 V1.2.1 (2001-12) EN 301 893 V1.2.3 (2003-08)	Test Reports	Conform
EMC (R&TTE, Article 3.1b)	EN 301 489-1 V1.4.1 (2002-08) EN 301 489-17 V1.2.1 (2002-08)	Test Reports	Conform
Safety (R&TTE, Article 3.1a)	EN60950-1: 2001	Test Reports	Conform

Marking: The product shall bare the CE mark, with our notified body number and the Class II identifier (Alert sign) as shown, on the right.

CE1313

Please observe country restrictions stated in user's manual.

The scope of this evaluation relates to the submitted aforementioned documents only.

The certificate is only valid in conjunction with the following number of annexes.

Number of annexes: 1

Sunnyvale, California, USA,
Location

07 Oct 2004
Date of Issue

John Chan
Conformity Assessment Body

Bay Area Compliance Laboratory Corporation, 230 Commercial Street, Sunnyvale, CA 94085, USA
<http://www.baclcorp.com>

Annex 1 of the Certificate „EXPERT OPINION“

Registration no.: S0410068

Date: 2004-10-07

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Product Characteristics for Wireless Tri-Mode Access Point

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, Proxy ARP, multicast/broadcast storm threshold filtering, TC/PUDF 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



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Conformity Details

Evaluated Test Reports	
Requirement	Standard, test report number, date & laboratory
Radio spectrum	EN 300 328-1 V1.3.1 (2001-12) EN 300 328-2 V1.2.1 (2001-12) EN 301 893 V1.2.3 (2003-08) Test Reports S0410068-1, issued Oct. 06, 2004 by Bay Area Compliance Laboratory Corp.
EMC	EN 301 489-1 V1.4.1 (2002-08) EN 301 489-17 v1.2.1 (2002-08) Test Report S0410068-2 issued Oct. 07, 2004 by Bay Area Compliance Laboratory Corp.
Safety	EN60950: 2001 Test Reports E177793-A11-CB-1 issued Dec. 04, 2003 by UL International Demko A/S

End of Annex 1

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Annex 2 of the Certificate „EXPERT OPINION“

Registration no.: S0410068

Date: 2004-10-07

Antenna Information for Wireless Tri-Mode Access Point

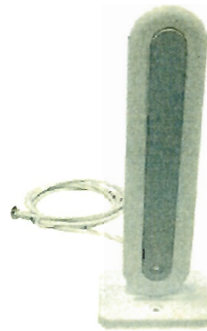
Dual-Band Omni-Directional Antenna Version 0.1
for 2.4 / 5.25 / 5.6 / 5.8 GHz

R0322-083

Electrical Specification

Frequency range	2400 MHz - 2500 MHz	5150 MHz - 5875 MHz
Peak gain*	2.5 dBi	3.5 dBi
Average gain*	0.5 dBi	1.5 dBi
VSWR	2.0 : 1 Max.	2.0 : 1 Max.
Polarization	Linear, vertical	Linear, vertical
Power handling	2 W (cw)	2 W (cw)
Impedance	50 Ohms	
Connector	Alinear 31-401A R/A plug	
Cable	Filotex 296769; 1.5 m	
Cable loss	2.1dB	3.6 dB

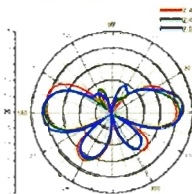
*including cable loss



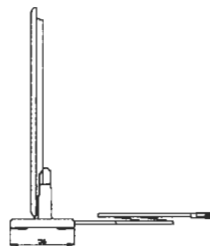
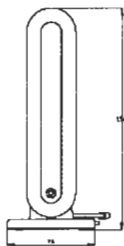
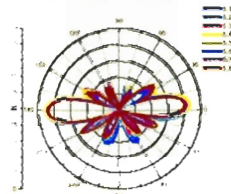
Environmental & Mechanical Characteristics

Temperature	- 10° C to +55° C
Humidity	95% @ 25° C
Radome color	White
Radome material	ABS+PC
Weight	110 gw
Dimensions	76 x 56 x 194 mm

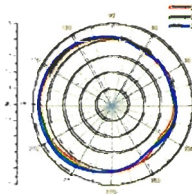
E-plane Co-polarization pattern



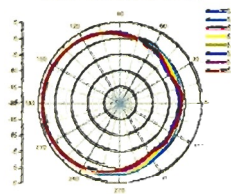
E-plane Co-polarization pattern



H-plane Co-polarization pattern



H-plane Co-polarization pattern



End of Annex 2