



ORiNOCO® OR-1000 Remote Outdoor Router

Affordable Dual-slot Remote Outdoor Router System for Enterprises and WISPs



The ORiNOCO OR-1000 remote Outdoor Router is a high-speed data networking system that supports point-to-point and point-to-multipoint links operating in the 2.4 GHz band. With its dual-slot architecture, the OR-1000 enables the creation of WiFi™ cells in conjunction with the outdoor connection. Easy to install and manage, the OR-1000 offers full interoperability with either an existing LAN infrastructure or a new LAN environment.

The most flexible outdoor router solution available in the market

The dual-slot OR-1000 is a remote outdoor router that can be used in point-to-point and point-to-multipoint outdoor configurations. In point-to-multipoint applications, the OR-1000 acts as the satellite and communicates with the central outdoor router (OR-1100), via the "Adaptive Dynamic Polling" protocol. The second slot of the OR-1000 can be used for creating a WiFi™ cell to serve as a local Access Point based on IEEE 802.11b technology. This eliminates the need to acquire additional equipment to create a WiFi™ cell.

A rich feature set

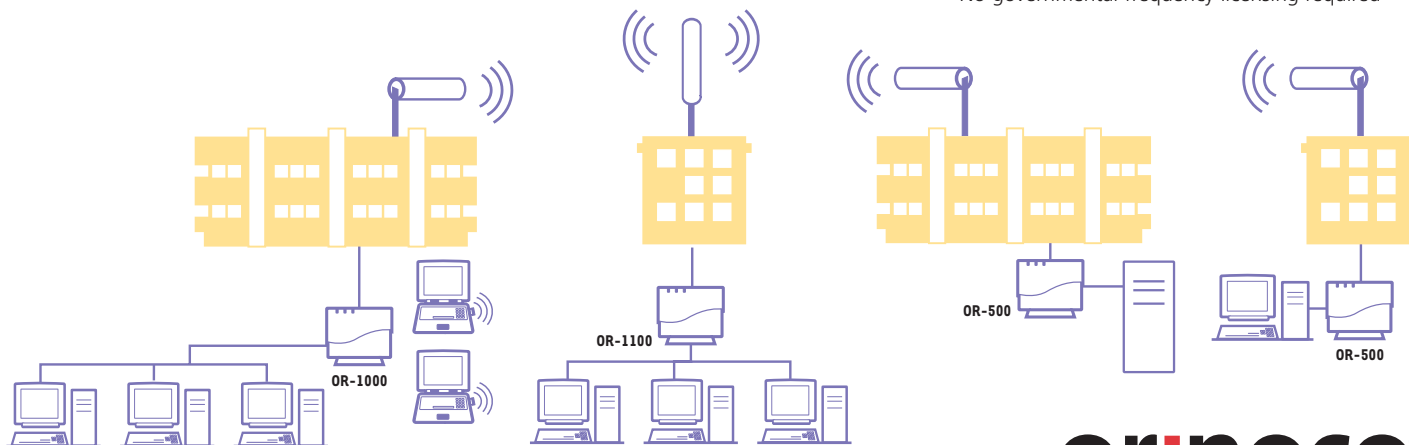
The OR-1000 is equipped with a rich set of innovative and powerful features, such as IP Routing (RIP v2) and spanning tree support for bridging and high security features including; RADIUS-based authentication, WEP 64 or 128 RC4-encryption. Standard IP routing allows multiple LANs with different IP-subnets. This enables separate and secure networks to be connected and setup, which allows wireless components to be added easily. Supporting IP routing features also helps reduce unwanted traffic on the wireless link.

Customized services for end-users

Ethernet (10 Mbit/s) or a Fast-Ethernet (100 Mbit/s) LAN fixed wire connections can be plugged into the OR-1000. Support for transparency to VLAN tags allows IT-managers to include the OR-1000 in their Virtual LAN environment.

ORiNOCO OR-1000 FEATURES

- Dual-slot outdoor router
- WEP 64 and 128 RC4-encryption
- 10/100 Mbit/s Ethernet support
- Support in second slot for WiFi™ cell
- Adaptive Dynamic Polling Protocol
- Transparent VLAN tagging
- Transparent bridge
- IP routing (RIP2-compliant)
- RADIUS-based authentication and bandwidth throttling
- Spanning Tree protocol and algorithm
- Range up to 16.3 miles in FCC configurations (24 dBi antenna + 15 dBm output power)
- Range up to 7 kilometers in ETSI configurations (14 dBi antenna + 8 dBm output power)
- No governmental frequency licensing required



OR-1000 Specifications

INTERFACE

Ethernet Interface	Ethernet 10/100 Base-T (RJ-45)
Wired LAN protocol	IEEE 802.3 (CSMA/CD)
Wireless Interface	2 PCMCIA slots for ORINOCO PC cards

RADIO CHARACTERISTICS

Frequency Channels	2.4 – 2.497 GHz			
Modulation Technique	Direct Sequence Spread Spectrum (CCK, DQPSK, DBPSK)			
Spreading	CCK 11 – Chip Barker Sequence			
Media Access Protocol	Adaptive Dynamic Polling (TurboCELL)			
Nominal Output Power	8 dBm (ETSI, FR) or 15 dBm (FCC)			
Bit Error Rate (BER)	Better than 10 ⁻⁵			
Data Rate	11 Mb/s	5.5 Mb/s	2 Mb/s	1 Mb/s
Typical Receiver	- 82 dBm	- 87 dBm	- 91 dBm	- 94 dBm
Delay Spread	65 ns	225 ns	400 ns	500 ns

PHYSICAL SPECIFICATIONS

Dimensions (H x W x L)	261 mm x 185 mm x 50 mm (10.2 in x 7.3 in x 2 in)
Weight	1.75 Kg (3.86 lb)

ENVIRONMENTAL SPECIFICATIONS

Operating	0°C to 40°C
Storage	-10°C to 50°C
Humidity	20 – 80 % relative humidity

POWER SUPPLY

Types	AU, UK, US/JP, EU
Voltages	Integrated module: Autosensing 100/240 VAC 50/60 Hz; 0.2 A, Support of Active Ethernet

LED'S

4	Power, Ethernet LAN Activity, Wireless LAN Activity Slot A and Slot B
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MANAGEMENT

ORiNOCO Manager software, SNMP MIB II compliant

WARRANTY

12 months (parts and labor)

MTBF

150,000 hours (without wireless card), 75,000 hours (with wireless card) based on workload of 8760 hours/year continuous operation, within operating conditions

DISTANCE FCC AND NON REGULATED CONFIGURATIONS

Antennas		24 dBi	14 dBi	12 dBi	10 dBi	7 dBi
24 dBi	(1 Mb/s)	26.2 km / 16.3 mi	19.0 km / 11.8 mi	17.3 km / 10.7 mi	15.8 km / 9.7 mi	14.1 km / 8.8 mi
	(2 Mb/s)	24.5 km / 15.2 mi	16.9 km / 10.5 mi	15.4 km / 9.6 mi	14.1 km / 8.8 mi	12.0 km / 7.5 mi
	(5.5 Mb/s)	21.8 km / 13.5 mi	14.4 km / 8.9 mi	13.1 km / 8.1 mi	12.0 km / 7.5 mi	10.2 km / 6.3 mi
	(11 Mb/s)	19.4 km / 12.0 mi	12.8 km / 8.0 mi	11.2 km / 7.0 mi	10.2 km / 6.3 mi	8.7 km / 5.4 mi
14 d Bi	(1 Mb/s)	N/A	12.0 km / 7.5 mi	10.9 km / 6.8 mi	9.5 km / 5.9 mi	8.1 km / 5.0 mi
	(2 Mb/s)	N/A	10.2 km / 6.3 mi	9.3 km / 5.8 mi	8.1 km / 5.0 mi	6.6 km / 4.1 mi
	(5.5 Mb/s)	N/A	8.7 km / 5.4 mi	7.6 km / 4.7 mi	6.6 km / 4.1 mi	5.5 km / 3.4 mi
	(11 Mb/s)	N/A	7.1 km / 4.4 mi	6.1 km / 3.8 mi	5.5 km / 4.4 mi	4.0 km / 2.5 mi

DISTANCE ETSI AND FRANCE CONFIGURATIONS

Antennas		24 dBi	14 dBi	12 dBi	10 dBi	7 dBi
14 dBi	(1 Mb/s)	N/A	7.0 km / 4.3 mi	6.9 km / 4.3 mi	5.5 km / 3.4 mi	4.0 km / 2.5 mi
	(2 Mb/s)	N/A	5.0 km / 3.1 mi	4.9 km / 3.0 mi	4.0 km / 2.5 mi	2.7 km / 1.7 mi
	(5.5 Mb/s)	N/A	3.5 km / 2.2 mi	3.5 km / 2.2 mi	2.7 km / 1.7 mi	1.9 km / 1.2 mi
	(11 Mb/s)	N/A	2.5 km / 1.6 mi	2.5 km / 1.6 mi	2.0 km / 1.2 mi	1.4 km / 0.9 mi

OR-1000 PACKAGE CONTENTS

- 1 x OR-1000
- 1 x CD-ROM (incl. OR-Manager software)
- 1 x Power supply
- 1 x Installation/Instruction guide



The Standard For
Wireless Fidelity

Wi-Fi is a trademark of the Wireless Ethernet
Compatibility Alliance, Inc.

Windows and Windows Me are registered
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More information on ORiNOCO products:

www.oringowireless.com

www.proxim.com

