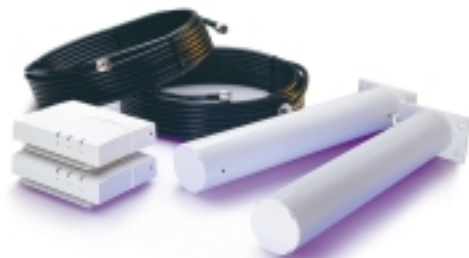




# ORiNOCO™ Point-to-Point Radio Backbone Kit

## Broadband Wireless Outdoor Router System for the Enterprise



The ORiNOCO Point-to-Point Radio Backbone Kit is a highly reliable wireless point-to-point networking solution for any enterprise. It incorporates the best radio technology in the market from the supplier of the most popular wireless LAN technology in the world. Expect years of reliable performance and world-class after-sales technical support from ORiNOCO's Call Center, operating 24 hours a day, 7 days a week. The Point-to-Point Radio Backbone Kit is easy to install and manage, and offers full interoperability with either an existing LAN infrastructure or a new LAN.

### A comprehensive, all-in-one-box solution

The ORiNOCO Outdoor Point-to-Point Radio Backbone Kit is a factory pre-configured system that enables users to easily, quickly, and economically install a wireless LAN bridge between two locations. Advanced technology offers all the benefits of 802.11b and unbeatable performance, range and throughput. The kit contains everything you need to establish a point-to-point connection, including ORiNOCO Outdoor Routers, cables, antennas, software and documentation.

### Technologically superior

Due to the master/slave protocol functionality, the Point-to-Point Radio Backbone kit provides a more reliable building-to-building wireless LAN bridge solution than other technologies. ORiNOCO offers the technological advantage you need when setting up a point-to-point system:

- Advanced Adaptive Dynamic Polling Protocol - enables a more reliable wireless link in noisy environments.
- Continuous Signal Quality Monitoring - tests Radio Frequency (RF) signal levels, noise levels and signal quality using a built-in remote Point-to-Point testing feature for easy diagnostics and system management.
- Routing functionality - offers enhanced bridging features, eliminating the need for a router at remote locations.

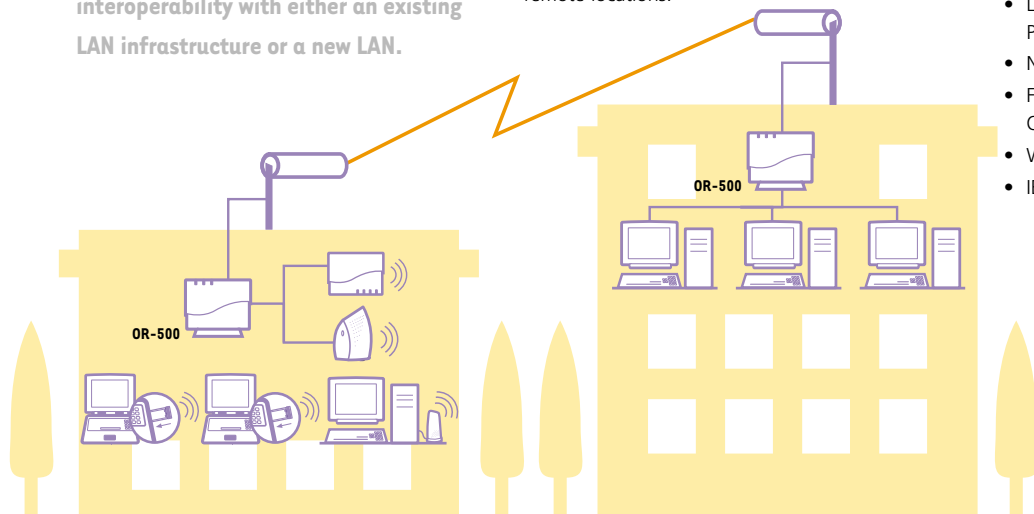
### Easy installation and management

The comprehensive step-by-step installation guide is easy to follow. Instructions are provided for the physical installation of the Point-to-Point Radio Backbone Kit. In addition, detailed guidelines for mounting the Access Points and 14dbi Yagi Antennas, antenna alignment, proper cable installation, data network connectivity, software loading and equipment configuration, along with testing and commissioning procedures are provided.

The Point-to-Point Radio Backbone Kit is part of the complete ORiNOCO product family of infrastructure and client products — all you need to deliver wireless LAN functionality in your home, business or enterprise.

### POINT-TO-POINT RADIO BACKBONE KIT FEATURES

- High performance 2.4GHz integrated 11 Mbit/s radio
- 128-bit key security using RC4 encryption
- 10 Mbit/s Ethernet Port
- Adaptive Dynamic Polling
- Protocol Filtering for bridged protocol
- Transparent VLAN tagging
- Continuous Signal Quality Monitoring
- Remote Wireless Link Analysis
- Low Cost Solution relative to regulated Frequency Products
- No Governmental Frequency Licensing required
- Factory Pre-Configured for Network Bridge Operation
- Wide coverage range of up to 6 miles/9.7 km
- IEEE Wi-Fi (802.11b) compliant



## About Agere Systems

The Wireless Communications and Networking Division (WCND) of Agere Systems, formerly known as the microelectronics division of Lucent Technologies, is a global leader in wireless local area network (WLAN) technology. It designs and sells ORiNOCO wireless LAN products and solutions through a network of leading OEM customers. Agere Systems has also established WLAN sales channels to service providers, enterprise customers and end-users through several e-commerce sites and a vast array of value-added resellers. The ORiNOCO line of products encompasses a full range of indoor and outdoor WLAN products, as well as enhanced security products for public areas and security-conscious enterprises.

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

Windows and Windows Me are registered trademarks of Microsoft Corporation.

More information on ORiNOCO products:

[www.orinocowireless.com](http://www.orinocowireless.com)



## Point-to-Point Radio Backbone Kit Specifications

INTERFACE	
Ethernet Interface	Ethernet 802.3, -10 Base-T (RJ-45 Connector)
Wireless Interface	One PCMCIA Slot per OR-500 equipped with ORiNOCO Gold PC Card

RADIO CHARACTERISTICS	
Frequency Channels	2400 - 2483.5 MHz
Modulation Technique	Direct Sequence Spread Spectrum (CCK, DQPSK, DBPSK)
Spreading	11 - chip Barker Sequence
Media Access Protocol	Adaptive Dynamic Polling (TurboCell)
Bit Error Rate (BER)	Better than 10 <sup>-5</sup>
Nominal Output Power	15dBm (FCC); 8dBm (ETS, FR)

PHYSICAL SPECIFICATIONS	
Dimensions (H x W x L)	130 x 175 x 45mm (w/ Wall Bracket)
Weight	10kg

ENVIRONMENTAL SPECIFICATIONS	
Operating	0°C to +40°C
Storage	-10°C to +50°C

POWER SUPPLY	
Types	AU, UK, US/JP, EU, (Active Ethernet – Future)

VOLTAGE	
100VAC to 240VAC (±10%)(47-63Hz)	

LEDS	
3 LEDs:	Power, Ethernet LAN Activity, Wireless LAN Activity

### Operating Systems and include Windows 95, 98 and 2000

MANAGEMENT	
ORiNOCO OR Manager Software, SNMP MIB II Compliant	

WARRANTY	
12 Months (Parts & Labor)	

ACHIEVABLE DISTANCE FCC, AND NON-REGULATED CONFIGURATIONS			
Antennas	Transmission speed	14 dBi (Directional Antenna)	
14 dBi (Directional Antenna)	1 Mbit/s	9.5 km/5.9 mi	
	2 Mbit/s	8.1 km/5.0 mi	
	5.5 Mbit/s	6.6 km/4.1 mi	
	11 Mbit/s	5.5 km/3.4 mi	

#### NOTE:

- The distances referenced here are approximations and should be used as estimates only.
- Maximum ranges are based on a clearance of 10 meters, without obstacles in the path of the antenna beam and using standard Agere System accessories and 50' cable.

Antenna Functional Specifications				Antenna Mechanical Specifications			
<b>ANTENNA</b>				<b>ANTENNA</b>			
Frequency range	2400 – 2500 MHz			Length	457 mm		
VSWR	Less than 2 : 1, 1.5 : 1 nominal			Mounting plate	mount 127 x 79 mm		
Nominal impedance	50 Ω			Max mast diameter	41 mm		
Gain	14 dBi ± 1 dB, including cable and connector			Min. mast diameter	28 mm		
Polarization	Vertical			Mounting method	Clamps to vertical mast		
Front to back ratio	Greater than 20 dB			U-bolt	diameter 48mm length 76 mm material stainless steel		
Half power beam-widths	E Plane	H Plane		Nut (locknut)	diameter 11 mm hex. material stainless steel		
	30.8 ± 2°		31.4 ± 2°				
Power	10 Watts						
<b>CABLE</b>				<b>CABLE</b>			
Type	RG58A/U			Length	250 mm	Conductor	Copper
				Dielectric	PE	Jacket	PVC
				Shielding	Copper braid	Jacket color	Black
<b>CONNECTOR</b>				<b>CONNECTOR</b>			
Type	Standard N-connector, Female jack			Braid and jacket cable attachment (for crimp types)	Hex braid crimp		
				Coupling	5/8" -24 thread		
				Center conductor cable attachment	Solder		
				Contact support	100% captive pin		

PACKAGE CONTENTS	
2 x OR-500, 2 x Pigtailed, 2 x 50' Low Loss Cable, 1 x Crossover Ethernet Cables, 2 x 14dBi Yagi Antenna, 2 x Surge Arrestor, 2 x Standard Ethernet Cables, Step-by-Step Installation plus Standard Docs.	

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