



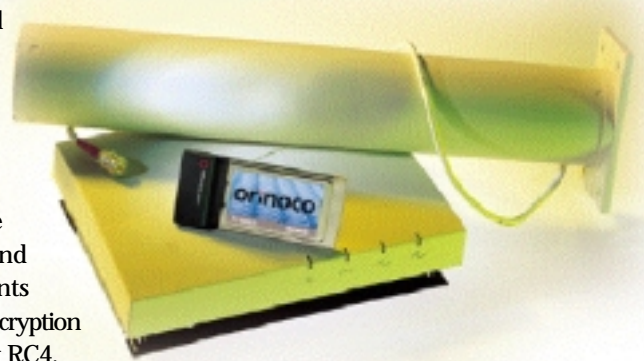
ORiNOCO™ Outdoor Router System

High Speed Fixed Wireless Data Networking

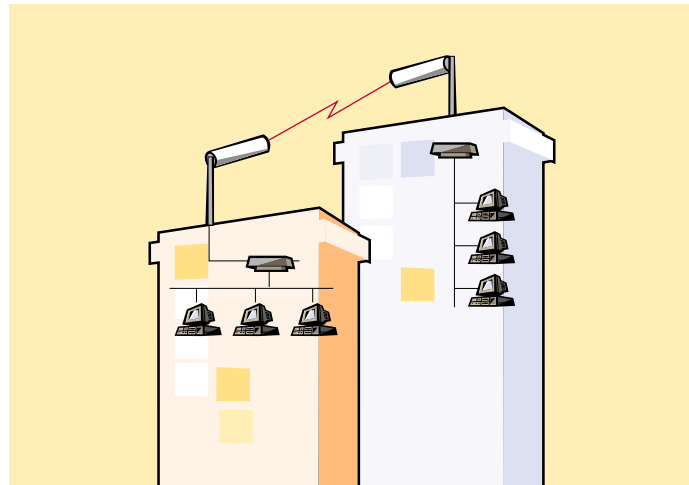
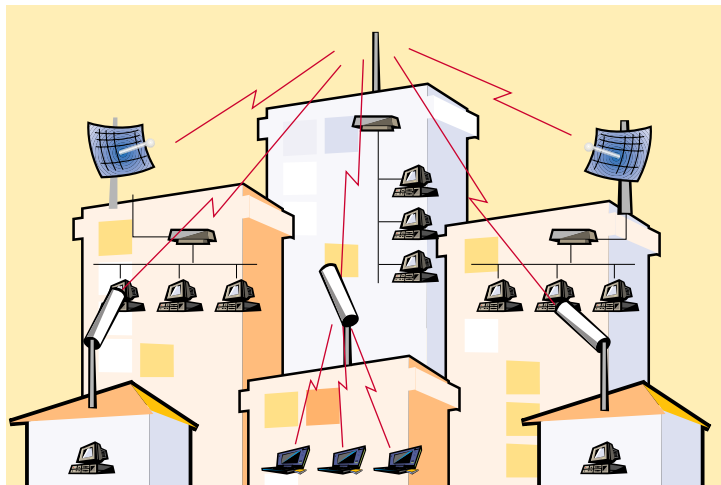
High speed data networking system for point-to-multipoint and point-to-point links operating in the 2.4 GHz band. The system includes the ORiNOCO COR-1100 Central Outdoor Router, the ROR-1000 Remote Outdoor Router and the Outdoor Router Client (ORC).

- Creates a PtP system linking two LANs, using 2 ROR's
- Creates a PtMP system using one COR and up to 16 ROR's per channel, up to 3 collocated channels are possible
- ISP's can create a wireless network providing Internet access to residential customers operating on Windows 95,98, or NT desktop or laptop computers, using ORC software and ORiNOCO PC Cards
- Three co-located COR's connect up to 96 customers using ORCs
- Range of up to 16 miles (26 km)

- With a data rate of 11 Mbps and 5.5 Mbps, the system is faster than an E1/T1 data link
- Sophisticated dynamic polling mechanism avoids air collisions
- 10/100Base-T Ethernet interface allows integration in both 10 and 100 Mb/s Ethernet environments
- Highly secure system using data encryption levels of 64-bit WEP and 128 bit RC4, Mac Address based Access Control Table, and System Access Pass Phrase
- Standard IP Routing enables multiple LANs with different IP-Subnets enabling connection and set up of secure separate networks, allowing easy additions of wireless components to an existing wired network
- Bandwidth management allows network managers to set maximum data throughput pipes in ORC with settings of 64k, 128k, 256k, 384k, 512k and Max.



- Transparency to VLAN tags allows network managers to include Outdoor Routers in their Virtual LAN environment
- Creates in-building wireless LAN using Access Point roaming functionality on the 2nd PC card slot
- Remote Software Upgrades and Configuration of ROR's and COR's from any node in the network



YOUR MOBILE BROADBAND CONNECTION

orinoco™
THE NEW WAVELAN

ORiNOCO Outdoor Router System

Hardware:	COR-1100 & ROR-1000
Dimensions	261mm x 185mm x 50mm (10.2 in x 7.3 in x 2 in)
Temperature range	0-40 degrees Celsius
Humidity	20% to 80% relative humidity
Weight	1.75 kg (3.86 lb.)
Wired LAN Connection	Ethernet 10/100Base-T (RJ-45)
Wireless LAN connection	2 PCMCIA slots for ORiNOCO PC Cards
LED indicators	4 LEDs: Power, Ethernet LAN Activity, Wireless LAN Activity Slot A and Slot B
Wired LAN protocol	IEEE 802.3 (CSMA/CD)
Power Supply	Integrated module; Autosensing 100/240 VAC 50/60 Hz; 0.2A

Functionality:															
Features	<table border="0"> <tr> <td>16 Remote Outdoor Routers or 32 ORC per channel</td> <td>Protocol Filtering for bridged protocol</td> </tr> <tr> <td>11 Mbps, 5.5 Mbps, 2 Mbps and 1 Mbps Data Rate</td> <td>Data Encryption (Via PC Card):</td> </tr> <tr> <td>Adaptive Dynamic Polling</td> <td>• 64 WEP</td> </tr> <tr> <td>Data Compression</td> <td>• 128RC4</td> </tr> <tr> <td>Authentication based MD-5 CHAP</td> <td>Transparent to VLAN tags</td> </tr> <tr> <td>MAC Address Table</td> <td>Access Point Roaming</td> </tr> <tr> <td>Bandwidth Allocation on a per remote basis (ORC)</td> <td>IP Routing (RIP 1 compliant)</td> </tr> </table>	16 Remote Outdoor Routers or 32 ORC per channel	Protocol Filtering for bridged protocol	11 Mbps, 5.5 Mbps, 2 Mbps and 1 Mbps Data Rate	Data Encryption (Via PC Card):	Adaptive Dynamic Polling	• 64 WEP	Data Compression	• 128RC4	Authentication based MD-5 CHAP	Transparent to VLAN tags	MAC Address Table	Access Point Roaming	Bandwidth Allocation on a per remote basis (ORC)	IP Routing (RIP 1 compliant)
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Warranty	1 year														

Hardware:	ORiNOCO PC Card
Dimension	PCMCIA Type II
Data Rate	11 Mbps, 5.5 Mbps, 2 Mbps and 1 Mbps Data Rate
Modulation technique	Direct Sequence Spread Spectrum (CCK, DQPSK, DBPSK)
Spreading	CCK 11-chip Barker sequence
Media Access Protocol	TurboCELL
Output Power	8 dBm (ETS, FR) 15 dBm (FCC)
No. of Selectable Subchannels	ETS-13 FCC-11 France-4
Antenna Connector	Proprietary connector
Data Rate	11 Mb/s 5.5 Mb/s 2 Mb/s 1 Mb/s
Typical Receiver Sensitivity@BER 10 ⁻⁵	-82 dBm -87 dBm -91 dBm -94 dBm
Delay Spread@BER 10 ⁻⁵	65ns 225ns 400ns 500ns
Warranty	3 years

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 dBi	(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 kmi/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/3.4 mi	4.0 km/2.5 mi

Distance ETS and France Configurations

Antennas			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

The distances referenced here are approximations and should be used for estimation only.

Maximum ranges are based on a clearance of 10 meters, without any obstacles in the path of the antenna beam and using standard Lucent Technologies accessories including Antenna Cable Type (6m/20 ft.)

For additional information, please contact your Lucent Technologies Sales Representative. You can also visit our web site at <http://www.lucent.com/orinoco> or call 1-800-928-3526

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