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Orinoco Outdoor Wireless LAN

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ORINOCO OUTDOOR WIRELESS LAN

THE TECHNOLOGY

One of major impacts on project success is the quality, quantity, and timing of information exchange during project execution at the jobsite. Paper-based jobsite construction process are becoming obsolete because they are unable to deliver just-in-time information. It is believed that shifting to electronic, or wireless, exchange of information can help improve the timely delivering and accessing of information. Wireless communication allows mobile communications to be located at various places within a construction site and communicate with each other as well as with a central, fixed location such as the jobsite trailer. Wireless LAN is one of the wireless data communication technologies that can be used in a jobsite.

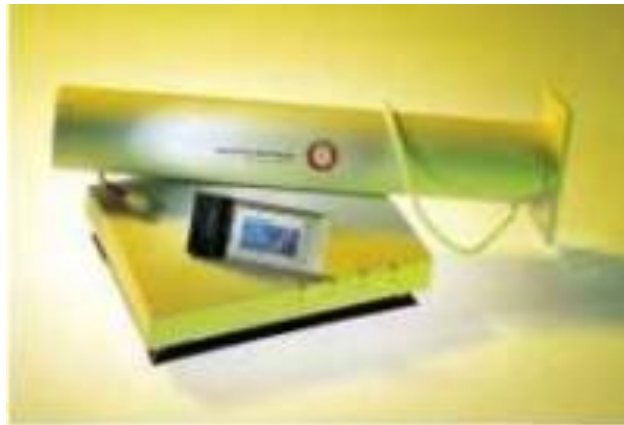


FIGURE 1 ORINOCO OUTDOOR ROUTER

The Orinoco Outdoor system consists of:

- **ORINOCO Central Outdoor Router (COR).** The COR is the central router in a multipoint network. The unit is located in the central building of a network and connects up to 16 Remote Office Router or 32 ORINOCO Fixed Wireless PC Cards running Internet Client software.
- **ORINOCO Remote Outdoor Router (ROR).** The ROR unit to be used as the remote router. The unit is located in the boundary of a network. A ROR connects to one other unit. This can be either another ROR for a point-to-point connection or a COR for a point-to-multipoint connection.



- **ORINOCO Internet Client Software.** The Internet Client Software runs on a ORINOCO Fixed Wireless PC Card, which is located in a desktop or portable computer. The software enables the PC Card to be used as a remote station in a multipoint network, connecting to the Central Office Router. A Central Office Router can connect up to 32 WaveACCESS PC Cards, running Internet Client Software.

THE BENEFITS

ORINOCO Outdoor Solutions offer the following benefits:

- 11 Mb/s data rate - High Speed connections between buildings.
- Sensitive radio technology - Ranges up to 10 miles @ 11 Mb/s
- License Free - No more monthly payments to service providers.
- Quick and Easy Deployment, Installation and Operation - Low Cost Deployment
- Encryption - Secure access for customers
- Bandwidth management - Enables network managers to fully control their wireless networks.
- Sectorized System - Enables to set up scalable networks SNMP management Enables network manager to centrally manage the Outdoor Routers

STATUS

Other than Outdoor Solution, there are three other product lines presented in the ORINOCO solution:

- **Enterprise Solutions** (formerly: WaveLAN) provide reliable, secure high-speed network connectivity in business environments.
- **Public Access Solutions** offer high-speed Internet access at Airports, convention centers, university campuses and other public areas.
- **Home/SOHO Solutions** provide high-speed wireless Internet access for the home and small offices.

BARRIERS

A primary difficulty with maintaining reliable wireless LAN performance is the potential inference from other users in the band. The inference can occur from other users in the same network or from other users from different wireless LAN system that uses the same frequency and is co-located in the same region. Another source of inferences is from non-wireless LAN devices operating in the frequency band.



POINTS OF CONTACT

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REVIEWERS

Peer reviewed as an emerging construction technology

DISCLAIMER

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