Wireless LANs for Next-Generation Networks

Designed for a workforce on the go, Enterasys Networks™ RoamAbout wireless solution offers enhanced user mobility, ease of installation, extended connectivity, increased productivity, and great cost savings. Benefit from award-winning features including uninterrupted access, 802.11b compliance, vendor interoperability, easy upgrades and free configuration tools—as well as the vital security you expect.

The RoamAbout family is based on two key components: the Access Point 2000 which quickly and easily connects to your wired LAN via Unshielded Twisted Pair, and an 11 Mbps 2.4 GHz Direct Sequence Spread Spectrum (DSSS) wireless Ethernet PC Card.

A full-functioning switch, the Access Point connects to your wired LAN by a 10Base-T Ethernet connection and provides Layer 2 bridge functionality. An IEEE 802.11b Direct Sequence Spread Spectrum (DSSS) wireless network PC card, the RoamAbout PC Card functions like any standard wired Ethernet card, but uses radio frequencies instead of a cable for the LAN connection. The RoamAbout PC Card remains connected to the network by seamlessly switching to a different Access Point as you roam throughout the network. The RoamAbout PC Card fits into any type II PC card slot on laptop devices, and can be installed in desktop computers without PCMCIA using the optional RoamAbout ISA adapter card.

Whether building new departmental workgroups where cabling runs are difficult or prohibited, or providing temporary access to laptop users or users with compliant hand-held devices, RoamAbout is the perfect answer to extended connectivity and better productivity.
Take Your LAN with You

Enterasys’ RoamAbout solutions allow you to quickly, easily, and economically establish a wireless data LAN network, offering users dependable, Ethernet-like performance. With RoamAbout, no user in-building Radio Frequency license is required because it utilizes the ISM (Industrial Scientific and Medical) band with a performance-enhancing 2.4 GHz Direct Sequence Spread Spectrum frequency. RoamAbout is a productivity-enhancing utility that is easily integrated into any compliant infrastructure, allowing businesses and organizations the freedom they need to spread the benefits of shared data access. Whatever industry you’re in, RoamAbout is easily adapted as a high-performance alternative to otherwise costly network expansion. Customers who rely on RoamAbout include health care customers such as hospitals, clinics, research facilities and telemedicine operations; K-12 schools, colleges, universities and distance learning campuses; Fortune 500 and 1000 customers; manufacturing facilities; historical sites; and government operations.

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users need uninterrupted mobile access</td>
<td>• RoamAbout wireless solutions enable users to roam from Access Point to Access Point through the network—with no interruption</td>
</tr>
<tr>
<td>Traditional cabling is impractical in older, historical buildings</td>
<td>• RoamAbout lets you establish reliable, mobile network connectivity without traditional cabling—perfect for buildings where wired networks would be too impractical and expensive</td>
</tr>
<tr>
<td>Already have some other wireless equipment from other vendors</td>
<td>• IEEE 802.11b 11 Mbps compliance and multivendor interoperability provide seamless connectivity to other vendors’ 802.11 products</td>
</tr>
<tr>
<td>Adding to the existing wired network would be too expensive</td>
<td>• RoamAbout is easily adapted as an affordable, high-performance alternative to otherwise costly network expansion—RoamAbout’s Power Injector saves hundreds in installation costs</td>
</tr>
<tr>
<td>Highly secure data transmission</td>
<td>• 40-bit WEP (Wired Equivalent Privacy) security or optional 128-bit (RC4 Algorithm) provide the highest level of security</td>
</tr>
</tbody>
</table>
Automatic Rate Selection Range for an Open Environment

<table>
<thead>
<tr>
<th>Speed</th>
<th>11 Mbps</th>
<th>5.5 Mbps</th>
<th>2 Mbps</th>
<th>1 Mbps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semi-Open Office in Meters/Feet</strong></td>
<td>50m</td>
<td>70m</td>
<td>90m</td>
<td>115m</td>
</tr>
<tr>
<td></td>
<td>165 feet</td>
<td>230 feet</td>
<td>300 feet</td>
<td>375 feet</td>
</tr>
<tr>
<td><strong>Closed Office in Meters/Feet</strong></td>
<td>35m</td>
<td>35m</td>
<td>40m</td>
<td>50m</td>
</tr>
<tr>
<td></td>
<td>115 feet</td>
<td>115 feet</td>
<td>130 feet</td>
<td>165 feet</td>
</tr>
</tbody>
</table>

Distances reflect maximum range under ideal test conditions. Ranges will vary dramatically depending on product position, surrounding construction and signal interference.

Sample RoamAbout Configuration

Wired LAN (Ethernet)

- Channel 11
- AP #3
- User A

- Channel 1
- AP #2
- User A

- Channel 6
- AP #1
- User A

- Distances reflect maximum range under ideal test conditions. Ranges will vary dramatically depending on product position, surrounding construction and signal interference.
TECHNICAL SPECIFICATIONS

Frequency Band
2400 - 2483.5 MHz

Number of Selectable Sub Channels Subject to Local Regulations
United States (FCC): 11
France (FR): 4
Japan (JP): 14
Other Countries (ETSI): 13

Modulation Technique
Direct Sequence Spread Spectrum (CCK, DQPSK, DBPSK)

Spreading
11-chip Barker sequence

Bit Error Rate
Better than 10^-5

Media Access Protocol
CSMA/CA (Collision Avoidance) with ACK

Interface
PC Card Type II Extended

Data Rate
11 Mbps (with fall back rates of 5.5, 2, and 1 Mbps)

Automatic Rate Selection Range
Open Environment. See Chart page 3

Compatibility
Supports Windows 95, 98, Windows NT, Windows 2000, Macintosh, Windows CE and Novell Client 3.x & 4.x

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature
41 to 122°F (5° to 50°C)

Non-Operating Temperature
-40° to 151°F (-40° to 66°C)

Operating Humidity
95% max. (non-condensing)

Maximum Rate of Change
36°F/h (20°C/h)

Altitude Above Sea Level
To 2.4 km (8000 ft)

Air Flow
Convection cooled

AGENCY AND STANDARDS SPECIFICATIONS

Safety
US: UL1950
Canada: CSA C22.2 No. 950
Europe: EN60950 and 73/23/EEC
Australia: AS3260

Electromagnetic Compatibility
US: FCC Part 15
Canada: C-S-03
Europe: EN55022, EN50082-1, 89/336/EEC and ETS 300-328
Japan: VCCI V-3
Australia: AS3548

ORDERING INFORMATION

CSIWS-*
RoamAbout Access Point, requires PC card

CSIBD-**
11 Mbps PC Card for use in client devices and Access Points

CSIBD-**.128
128-bit Encryption PC Card

CSI6D-**
RoamAbout PC Card, 6 pack for use in client devices and Access Points

CSI6D-**.128
RoamAbout PC Card 128-bit Encryption, 6 pack for use in client devices and Access Points

OPTIONAL PRODUCTS

CS140D-**
RoamAbout PC Card, 40-card bundle

CS140D-**.128
RoamAbout 128-bit encryption PC Card, 40-card bundle

CSI6B-IP
RoamAbout ISa Carrier (Requires a PC Card CSIBD-***)

CSI6B-IA
RoamAbout Indoor Antenna—used for desktop PC applications where you want to extend the antenna or when Access Points are not ideally located

CSI6D-**.SP6
Includes 6 11Mbps PC Cards, one RoamAbout Access Point 2000, and an Indoor Antenna Extender

*Note: Use -AA for North America, -AB for international with 220-volt input
**Note when placing orders please use -AA for Americas, -AB for Europe/Asia-Pacific, -AF for France, -AJ for Japan
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