

# LA 41X1 PC Adapter



## Spectrum24® High Rate

IEEE 802.11b, DIRECT SEQUENCE,  
11 Mbps WIRELESS LAN

### IEEE 802.11b Ethernet-speed Connectivity for Wireless Mobile and Portable Computing

Based on the IEEE 802.11b open standard for wireless local area networking, the Spectrum24® High Rate (HR) LA 41X1 PC Card slips into any laptop or other device with a PC Card slot, providing high-throughput, Ethernet-speed connectivity for wireless data communications. With the LA 41X1 PC Card installed, your workforce gains instant, untethered access to vital network resources including corporate intranets, the Internet, documentation, and e-mail.

The LA 41X1's direct sequence spread spectrum transmission technology is ideal for supporting high-throughput applications such as training courses, CAD/CAM file sharing, video and rapid image transfer, presentations and Internet/intranet terminals. Plus, the LA 41X1 eliminates the expense and time of wiring when your IS requirements call for temporary, ad hoc, small office and kiosk networking.



Devices equipped with the LA 41X1, along with other Spectrum24 High Rate-compatible hand-held and fixed-mount computers, communicate with the Spectrum24 HR AP 41X1 Ethernet Access Point which serves as the connectivity point to your wired network or the hub of a standalone wireless network. Wherever associates are located, from sales floors to manufacturing areas, the LA 41X1 and AP 41X1 provide fast access to vital information.

*Continued on back*

#### Features

11 Mbps direct sequence (DS) high data rate transmission

IEEE 802.11b compliant

Automatic data rate and channel selection of 1, 2, 5.5 and 11 Mbps

Very low power consumption

Fast software upgrade via FLASH memory

Supports all popular network operating systems

One-piece PC Card design

Ridged or external antenna

Commitment to open standards at every hardware and software interface including IEEE 802.11b, HTML user interface, NIC utilities

Wired Equivalent Privacy (WEP) encryption and decryption

Scalable

Complete SymbolCare<sup>SM</sup> Service and support

Wi-Fi<sup>TM</sup> certified

User-friendly client tools

#### Benefits

Supports bandwidth-demanding applications and high-speed data transmission

Fully interoperable wireless networking based on the high rate standard

Optimized throughput, range and connectivity

Extended battery life

Simplified PC card update and maintenance

Reduces programming time and enables fast integration with enterprise systems

Provides durable and rugged wireless capability for PC-slot devices

Can be adapted to meet site conditions

Bridges communication paths between wired and wireless network segments

Uses diverse application tools in the same wireless LAN environment  
Supports technology that's already installed; integrates seamlessly with existing systems

Ensures interoperability with wireless LAN devices from other vendors  
Protects your investment by ensuring migration path

Powerful data security at 64 and 128 bits

Adding an access point expands coverage and capacity

Count on Symbol to help you specify, configure, install and support your wireless LAN

Ensures interoperability among other Wi-Fi certified wireless systems for investment protection and system architecture flexibility

NICTT-Task tray applet that monitors a Spectrum24 WLAN card

My WLAN Places—interface that creates profiles of WLAN client information

## Integrated Antenna and Dynamic Rate Scaling for Maximum Range and Throughput

The Spectrum24 HR LA 41X1's one-piece PC card design has an integrated antenna that supports transmit-and-receive antenna diversity—double antenna site coverage for maximum range and throughput.

With Dynamic Rate Scaling as defined by the 802.11b standard, the LA 41X1 always seeks to transmit data at 11 Mbps then automatically scales to 5.5 Mbps, as well as 2 Mbps and 1 Mbps, to ensure wireless network connectivity. This also increases signal range—when the signal strength increases, its speed also increases until it reaches an optimal rate, ensuring the highest level of service and best continuity for data transmission.

## Wi-Fi™ Interoperable

Symbol's LA 41X1 bears the Wi-Fi logo, a mark granted as the official "seal of interoperability" by the Wireless Ethernet Compatibility Alliance (WECA). Only select wireless networking products possess this characteristic of IEEE 802.11b. This standard provides system architecture flexibility and investment protection for 802.11b interoperable installations.

## Easy Setup and Maintenance; Industry Driver Support

The LA 41X1 PC Card provides a low-maintenance connectivity option for on-the-move associates. Its power management capabilities help to ensure a very low rate of power consumption, extending the battery life of mobile devices. Industry-standard ODI and NDIS drivers reduce programming time, as well as provide full documentation for fast configuration; Windows 95 OSR2 (95b), 98, NT 4.0, 2000, ME and CE drivers are also provided. The user friendly Spectrum24 Plus Pack Installation Utility allows network administrators to easily change adapters and monitor client activity.

## Easy Administration and Network Management

Client devices using the LA 41X1 PC Card are administered using a number of quick installation, maintenance and upgrade management tools. In addition, your entire WLAN installation can be managed using Symbol's SpectrumSoft™ suite of tools, including software for monitoring and controlling network activity and performance. SpectrumSoft offers Web-based tools

for fast application development, and supports three-tier client/server architecture for Internet- and intranet-based thin-client connection to your servers and host systems.

## Extending Information Wirelessly

With more than 70,000 wireless LAN sites installed, Symbol's global wireless industry leadership is founded on a comprehensive range of innovative technologies and knowledgeable services. Spectrum24 brings you a unique combination of benefits that enable your organization's end-to-end mobile computing strategy and optimizes the capture, computing and communication of data crucial to business decision-making and success.

## Spectrum24 High Rate Wireless LAN Specification Highlights

Radio Characteristics	
Frequency Range:	Worldwide product covering 2.4 to 2.5 GHz, programmable for different country regulations
Data Rate:	11 Mbps per channel maximum
Output Power:	100 mW
Power Management:	Continuous Aware and Power Saving Modes
Range:	Data throughput scaled to support up to 1500 ft./450 m outdoors and up to 300 ft./90 m indoors
TX Maximum Radiated EIRP:	FCC regulations part 15.247 in U.S.; ETS 300 328 in Europe; RCR STD-33 in Japan
Modulation:	Direct Sequence Spread Spectrum (DSSS) with BPSK (1 Mbps), QPSK (2 Mbps), and CCK (5.5 and 11 Mbps)
TX Out-of-Band Emissions:	FCC regulations part 15.247, 15.205, 15.209 in U.S.; ETS 300 328 in Europe; RCR STD-33 in Japan
Operating Temperature:	-20° to 70° C/-4° to 158° F
Storage Temperature:	-30° to 80° C/-22° to 176° F

Network Characteristics	
Driver Software Support:	Microsoft Windows 95/98, Windows NT 4.0, Windows CE 2.11 (only for Symbol's PPT2740), Windows 2000, Windows ME; NDIS 4 AND 5
Access Protocol:	CSMA/CA
Roaming:	Virtually instantaneous



Specifications are subject to change without notice.

All product and company names are trademarks, service marks or registered trademarks of their respective owners.



For system, product or services availability and specific information within your country, please contact your local Symbol Technologies office or Business Partner.

**Corporate Headquarters**  
**Symbol Technologies, Inc.**  
One Symbol Plaza, Holtville, NY 11742-1300  
TEL: 1-800-722-6234/1-631-738-2400  
FAX: 1-631-738-5990

**For Asia Pacific Area**  
**Symbol Technologies Asia, Inc.**  
(Singapore Branch)  
Asia Pacific Division  
230 Victoria Street #04-05  
Bugis Junction Office Tower  
Singapore 188024  
TEL: 65-337-6588  
FAX: 65-337-6488

**For Europe, Middle East and Africa**  
**Symbol Technologies**  
EMEA Division  
Symbol Place, Winners Triangle  
Berkshire, England RG41 5TP  
TEL: 44-118-9457000  
FAX: 44-118-9457500

**For North America, Latin America and Canada**  
**Symbol Technologies**  
The Americas  
One Symbol Plaza  
Holtville, NY 11742-1300  
TEL: 1-800-722-6234/1-631-738-2400  
FAX: 1-631-738-5990

**Symbol World Wide Web Internet Site**  
For a complete list of Symbol subsidiaries and Business Partners worldwide contact us at:  
<http://www.symbol.com>  
E-mail: [webmaster@symbol.com](mailto:webmaster@symbol.com)

