LIFETIME WARRANTY

Wireless Ether-Serial Link

Single Port/Dual Port
WiFi Enabled
Serial Device Servers

LAVA Ether-Serial Links are among the most versatile networking devices.

LAVA: The Source for Ports

The LAVA WiFi Ether-Serial Link family is an ideal means of connecting RS-232 serial devices to a wireless LAN. Requiring fewer cables than a wired Ethernet serial device server, the WiFi ESLs are ideal for quick installations, where network wiring is difficult or when devices are frequently moved among locations. Capable of secure data connections using WEP, WPA, or WPA2 encryption, the WiFi ESLs can operate in either Infrastructure mode or Ad-Hoc mode, for maximum flexibility. In Infrastructure mode, the WiFi ESL can connect to wireless access points, while in Ad-Hoc mode the WiFi ESL can form a point-to-point wireless connection with a single WiFi capable computer.

Simple Installation

The software behind LAVA Ether-Serial Links makes installation effortless. **LAVA *Ether Link Manager*** makes the serial ports appear as native COM ports, which enables Windows® (and any applications running on the PC) to 'see' those ports as internal ones, regardless of whether they are 10 feet or 10,000 miles away. This makes it possible to find, connect, and configure LAVA Ether-Serial Links anywhere on a wireless LAN in minutes.

Flexible Configuration

Whether you need to change serial port or network settings, remote configuration is possible thorough a browser-based interface, Telnet interface, or the LAVA *Ether Link Manager*. Network and WiFi configuration is also possible through the browser-based interface or through direct serial port connection.

Applications

LAVA Ether-Serial Links are perfect serial device servers for Point-of-Sale, factory automation, data collection, building automation, security, health care, and logistics connectivity. Anywhere a remote serial port is needed, a LAVA Ether-Serial Link can fit the bill.

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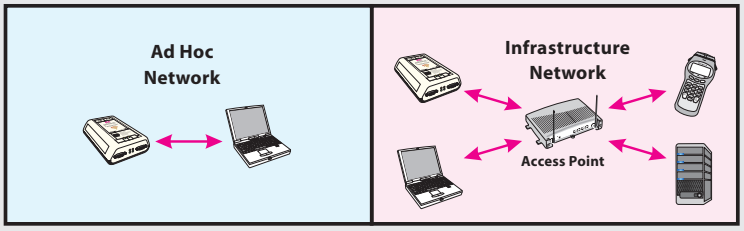
Network Operation Modes



Ad Hoc Mode: Ad Hoc mode (default) is a peer-to-peer connection between two wireless devices capable of operating in Ad Hoc mode. The two devices have a direct wireless connection to each other, with no intervening wireless devices (or "infrastructure") such as wireless access points or routers. Both devices in an Ad Hoc connection have static IP addresses and use WEP or no security.

Infrastructure Mode: Infrastructure Mode is used to connect a wireless device to an intermediate piece of network infrastructure, typically an access point, router, or PC running access point software. A WiFi ESL in Infrastructure mode becomes a wireless part of a larger Local Area Network (LAN). Devices operating in Infrastructure mode can have either static or dynamically-assigned IP addresses.

The WiFi LAVA Ether-Serial Links have:

- One or two RS-232 serial ports
- Powerful serial port operating modes
- IEEE 802.11a/b/g Ethernet connection: wireless Ethernet
- IEEE 802.3 10BASE-T/100BASE-TX compatible Fast Ethernet MAC with dedicated 12KB SRAM for communications packet buffering
- Encryption: WEP (64-bit), WEP (128-bit), WPA (TKIP), WPA2 (AES)
- Infrastructure and Ad-Hoc network modes
- DHCP/manual IP address configuration
- Intuitive installation and configuration
- Auto-detection of Ether Links using LAVA *Ether Link Manager* software
- WiFi configuration through web browser or serial port
- Support for: IP, HTTP, ICMP, TCP, UDP
- Full-throughput non-blocking serial ports
- Ungradable firmware
- DIN rail mounting option
- Compact design
- Driver mode support: Win 2000 32-bit, 2000 Server 32-bit, Server 2008, Server 2008 R2, XP 32-bit, 7 32/64-bit, 8 32/64-bit
- Non-driver modes: O/S independent
- Software included

Serial Port Mode	Description
Driver (default)	Serial port is enumerated on the host computer as a local COM port. Software on the PC can access the ESL ports as normal COM ports. ***Applications:*** General serial port access from software running on a PC.
Raw Server	Raw TCP connection to an ESL port. The physical port on the ESL becomes a network resource with an IP address and port number. ***Applications:*** Remote monitoring, security systems.
Raw Client	Raw TCP connection to an ESL port. The physical port on the ESL is configured toconnect to a pre-defined IP address and port number. ***Applications:*** Remote device control, remote polled monitoring.
Data Connect	Combines Raw Client and Raw Server modes. The ESL will either initiate a TCP connection when activity is detected at the serial port, or it will receive TCP packetized serial data from the network port when an outside client connects to it. ***Applications:*** Provides a serial-to-serial communication link; can extend serial cables with an Ethernet connection.
RFC 2217	ESL port sends port configuration commands and serial data to the ESL using RFC 2217 framework for serial port control over Telnet. ***Applications:*** UNIX systems and other platforms that have RFC 2217 Telnet capability can access and control the ESL's serial port.
Ethernet Modem	Provides a standard "AT" command interface for communicating with devices over Ethernet, as well as control commands for the ESL. An ESL can "dial" an IP address and TCP port; incoming TCP connections are handled under AT command set rules. ***Applications:*** Remote console management, POS modem replacement.

WiFi ETHER-SERIAL LINKS:

Ether-Serial Link 1-232-DB9 WiFi	Single-port DB-9 RS-232, 1.5" x 4" x 5"; 38 mm x 97 mm x 130 mm, IEEE 802.11a/b/g
Ether-Serial Link 1-232-RJ45 WiFi	Single-port RJ-45 RS-232, serial power on pin 10, 1.5" x 4" x 5"; 38 mm x 97 mm x 130 mm, IEEE 802.11a/b/g
Ether-Serial Link 2-232-DB9 WiFi	Dual-port DB-9 RS-232, 1.5" x 4" x 5"; 38 mm x 97 mm x 130 mm, IEEE 802.11a/b/g
Ether-Serial Link 2-232-RJ45 WiFi	Dual-port RJ-45 RS-232, serial power on pin 10, 1.5" x 4" x 5"; 38 mm x 97 mm x 130 mm, IEEE 802.11a/b/g

About LAVA

Headquartered in Toronto, ON, Canada, LAVA Computer MFG Inc.designs and manufactures serial and parallel I/O boards and Ethernet-to-serial device servers that are widely used in the Point of Sale, Kiosk, Gaming, Industrial Automation, Security and Access Control industries. With well over a million LAVA products built into workstations, servers, retail POS systems, and industrial computers since 1984, LAVA I/O boards and Ether-Serial Links are trusted by resellers, distributors, OEMs and system builders in over 47 countries worldwide. Designed for lifetime performance, each LAVA connectivity link is tested by hand and covered by the LAVA Lifetime Warranty. For more information on LAVA Computer MFG, visit http://www.lavalink.com.
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