

## LonScanner™ FX Protocol Analyzer

Troubleshoot Your Network with Ease



The LonScanner FX Protocol Analyzer is an easy-to-use Windows tool that lets manufacturers, system integrators, and end users observe, analyze, and diagnose the behavior of LonWORKS® networks. It provides the advanced productivity features common in data network analyzers, adapted to the unique needs of control networks.

LonScanner FX simplifies network maintenance by collecting, time-stamping, and saving all network communications into log files that can be viewed and analyzed. Multiple logs and network interfaces can be active at the same time, making it easy to collect packets from multiple sources in a multichannel network, or from multiple networks.

## FEATURES

### Network Analysis Functions

- Captures, analyzes, characterizes, and displays all ISO/IEC 14908-1 packets on a channel, letting you analyze network activity and traffic patterns in detail.
- Supports receive filters that reduce the amount of logged data, helping you isolate problems faster.
- Receive filters can be based on packets to or from specific devices or network variables, and on packets using selected ISO/IEC 14908-1 protocol services.
- Saves all packets to log files.
- Summarizes network activity with summary statistics calculated from the received packets.
- Compatible with native ISO/IEC 14908-1 channels.
- Compatible with IP-852 channels (ISO/IEC 14908-4); IP-852 support requires a separately licensed LNS® Turbo Server on the same computer; IP-852 monitoring limited to packets forwarded to the LonScanner computer.

### Packet Displays

- Summary data log display with one packet per line.
- Highlights related packets to simplify log analysis.

- Displays device addresses, network variable addresses, and network variable data in raw form, providing compatibility with any network.
- Displays device and network variable names, as well as network addresses based on user definitions or based on names from any LNS network database, including those generated by the LonMaker® Integration Tool.
- Simplifies data interpretation by formatting network variable values based on LonMark® resource files.
- Provides text descriptions of each message and a description of the ISO/IEC 14908-1 protocol services used to transmit it.
- Eliminates the need to manually interpret the ones and zeros of the ISO/IEC 14908-1 protocol.

### Statistics Displays

- Shows detailed statistics related to network behavior, including total packet counts, error packet counts, and network loading.
- Displays summary graphs summarizing network loading and error rates over time, simplifying the identification of excessive network traffic or communication errors at different times of day.

- Reduces the time and effort needed to diagnose network problems.

### Network Interfaces

- Supports the Echelon U10 and U20 USB Network Interfaces, PCC-10 PC Card Network Adapter, PCLTA-21 PCI Network Adapter, i.LON SmartServer 2.0, i.LON SmartServer, i.LON 100 Internet Server, and i.LON 600 Internet Server.
- Multiple network interfaces can be active at the same time.
- Supports remote LAN or Internet connection to SmartServers and i.LON servers.
- Supports network interface sharing with LNS applications, including the LonMaker tool.

## SPECIFICATIONS

### PC Requirements

32-bit versions of Microsoft Windows 7, Windows Server 2008, and Windows Vista.

### Network Interface Requirements

Echelon U10 or U20 USB Network Interface, PCC-10 (Protocol Analyzer or standard version), PCLTA-20 (Protocol Analyzer or standard version), PCLTA-21, i.LON SmartServer 2.0, i.LON SmartServer, i.LON 100 Internet Server, or i.LON 600 Internet Server.

## DOCUMENTATION

*LonScanner FX Protocol Analyzer  
User's Guide*  
078-0305-01B

## ORDERING INFORMATION

The LonScanner FX Protocol Analyzer is available in three editions and two types of activation keys.

- A free Demo Edition can be downloaded from [www.echelon.com/lonscanner](http://www.echelon.com/lonscanner). The demo discards every third packet, operates for no more than 10 minutes at a time, doesn't save packet logs, and displays only 20 packets from a packet log. You can use this edition to try the LonScanner FX software before buying it, and you can convert the Demo Edition to a Professional Edition with a LonScanner FX Activation Key or a LonScanner FX Activation 5-Pack.
- The Professional Edition eliminates all the restrictions of the Demo Edition: It does not discard packets, has no time limits, saves packet logs, and displays any packets from a packet log.
- A LonScanner FX Activation Key can be used to convert the Demo Edition to a Professional Edition.
- The Professional Edition and the Activation Key are each available in a single-user version and a 5-Pack version for use by up to five users. Each user can install the LonScanner software on a primary and a secondary computer for non-simultaneous use by the same user. With a list price that's less than the list price of two copies of the single-user version, the 5-Packs provide a low-cost solution for multiple integrators in a branch office. Users can share a network interface such as the Echelon U10 USB Network Interface by moving the network interface among the five computers, or each user can purchase a single network interface for simultaneous use on up to five computers.

LonScanner FX Professional Edition  
Single User  
33110-401

LonScanner FX Professional 5-Pack  
33110-403

LonScanner FX Activation Key  
Single User  
33110-405

LonScanner FX Activation Key 5-Pack  
33110-407

