

i.LON[®] 10 Ethernet Adapter Models 72010 and 72011



Description

The *i*.LON 10 Ethernet Adapter is a low-cost interface that connects LONWORKS based everyday devices to the Internet, a LAN, or a WAN. Through the *i*.LON 10 Adapter, everyday devices like appliances, meters, load controls, lights, security systems, pumps, and valves can be connected to the Internet via a 10 BaseT broadband connection or PPP dial-up connection using an external modem. A local or remote service center running Echelon's LNS[®] server can then configure, monitor and control the devices – from across the room or across the world.

The *i*.LON 10 Adapter is available with a power line (Model 72011) or free topology twisted pair (Model 72010) channel interface. The power line version signals through the power mains of a home or building, and has the advantage of requiring no new wires – simply plug the adapter into the power mains and it's connected to the other power line based devices. The free topology adapter uses inexpensive twisted pair wiring to interconnect devices. Free topology technology has no wiring restrictions, and the installer is free to route the wire in the most expeditious manner.

The *i*.LON 10 Adapter operates on 10 BaseT Ethernet networks using TCP/IP, or can use an optional external modem when telephone dial-up is required. Designed for applications in which IP connectivity is needed to monitor, manage, or diagnose everyday devices, the *i*.LON 10 Adapter is designed as a Remote Network Interface (RNI) for use with LNS based network management tools. An RNI allows the *i*.LON 10 Adapter to act as an extension of the network management tool: anything that can be monitored, adjusted, or controlled locally can be done remotely via the RNI.

LNS is a client-server network management package whose scalable architecture allows multiple users to install devices, diagnose problems, and make changes to the LONWORKS network. LNS reduces complexity by automating common system

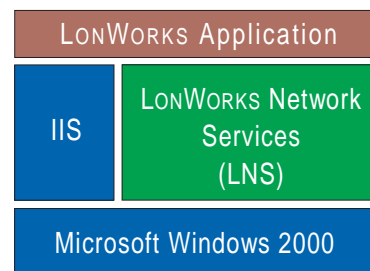
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- ▼ Connects LONWORKS[®] networks to TCP/IP Ethernet networks for residential, commercial, and utility applications
 - ▼ Power line (PL-20) or twisted pair (TP/XF-FT-10) LONWORKS channel support
 - ▼ 10 BaseT Ethernet interface
 - ▼ MD5 secured communications
 - ▼ Supports PPP remote dial-up to local ISP or corporate terminal servers with optional external modem
 - ▼ Compatible with NAT for operation behind firewalls
 - ▼ Static or acquired (DHCP) IP address
 - ▼ Uses less than 2% of available 10 BaseT bandwidth
 - ▼ Local or remote configuration via built-in configuration Web page
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tasks and handling directory management — providing the perfect platform on which to build value-added services.

To support redundant, off-site LNS servers, the *i*.LON 10 Adapter can be configured with the addresses of multiple LNS servers. The adapter will automatically "roll" from one server to the next if a connection is lost. Connectivity between the *i*.LON 10 Adapter and the LNS host may be secured using MD5 authentication.

The *i*.LON 10 adapter provides access to LONWORKS network variables, configuration properties and application messages. When used in conjunction with LNS and a standard Web server such as Microsoft's IIS (shipped as part of Windows[®] 2000 and Windows XP), the *i*.LON 10 Adapter allows LONWORKS information to be accessed from any Web browser. Home owners, property managers, and maintenance technicians can monitor and control everyday devices using a standard Web browser - at home, at work, on the road.

Designed for use in local, wide area or dial-up networks, the *i*.LON 10 adapter is compatible with common IP networking protocols including TCP, PPP, NAT, DHCP, DNS, MD5 and HTTP.



Specifications

Channel Type	72010 TP/FT-10 free topology twisted pair
	72011 PL-20N or PL-20C power line
Network Connector	72010 TP/FT-10: screw terminals
	72011 PL-20: 2.1mm (inside diameter) barrel connector
Operating Input Voltage	72010 TP/FT-10: 9 VDC for use with Echelon 780x0 power supplies
	72011 PL-20: 100-240VAC, 50/60 Hz
Input Voltage Connector	72010 TP/FT-10: 2.1mm (inside diameter) barrel connector
	72011 PL-20: 2.1mm (inside diameter) barrel connector
Operating Input Current	72010 TP/FT-10: 270mA
	72011 PL-20: 400mA
Controls	Service switch
Indicators	Power On/Wink
	Ethernet link
	Connect
	Service
Modem Port	Standard EIA-232 serial 9 pin
Modem Port Connector Type	DB-9
Ethernet Port	10 BaseT
Ethernet Connector Type	RJ-45
Temperature	
Operating	0 to +50°C
Non-operating	0 to +50°C
Humidity (non-condensing)	
Operating	25 to 90% RH @ 50°C
Non-operating	95% RH max @ 50°C
Dimensions	2.8cm x 15.3cm x 7.9cm (H x W x D) (1.11" x 6.04" x 3.13")
EMC	FCC Part 15 Class B, EN50065-1 Class B
Agency Listings	UL 60950, cUL C22.2 No. 60950-00, TÜV EN60950, CE, C-Tick.

Ordering Information

Product	Echelon Model Number
<i>i</i> .LON 10 Ethernet Adapter – TP/FT-10 (9VDC) – US Plug	72010-1
<i>i</i> .LON 10 Ethernet Adapter – TP/FT-10 (9VDC) – Continental Europe Plug	72010-2
<i>i</i> .LON 10 Ethernet Adapter – TP/FT-10 (9VDC) – UK Plug	72010-3
<i>i</i> .LON 10 Ethernet Adapter – TP/FT-10 (9VDC) – Japan Plug	72010-4
<i>i</i> .LON 10 Ethernet Adapter – PL-20 (12.5VDC) – US Plug	72011-1
<i>i</i> .LON 10 Ethernet Adapter – PL-20 (12.5VDC) – Continental Europe Plug	72011-2

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