



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 free topology twisted pair channel interface. 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. Model 72010R is compliant with the European Directive 2002/95/EC on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment.

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 operating system 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 tasks and handling directory management — providing the perfect platform on which to build value-added services.

i.LON[®] 10 Ethernet Adapter Model 72010R

- Connects LONWORKS[®] networks to TCP/IP Ethernet networks for residential, commercial, and utility applications
- ▼ 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

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 compatible 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. When using DHCP, the DNS server addresses are not acquired from the DHCP server and must be set manually.



Specifications

Compatible Operating	32-bit versions of Microsoft Windows Vista, Windows Server 2003,	
Systems (without external modem)	Windows XP, and Windows 2000	
Compatible Operating	32-bit versions of Microsoft Windows Server 2003,	
Systems (with external	Windows XP, and Windows 2000 Windows (Windows Vista and Windows 7 are not supported	
modem)	with an external modem)	
Channel Type	72010 TP/FT-10 free topology twisted pair	
Network Connector	72010 TP/FT-10: screw terminals	
Operating Input Voltage	72010 TP/FT-10: 9 VDC for use with Echelon 780x0 power supplies	
Input Voltage Connector	72010 TP/FT-10: 2.1mm (inside diameter) barrel connector	
Operating Input Current	72010 TP/FT-10: 270mA	
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.LON 10 Ethernet Adapter – TP/FT-10 (9VDC) – US Plug	72010R-1
i.LON 10 Ethernet Adapter – TP/FT-10 (9VDC) – Continental Europe Plug	72010R-2
i.LON 10 Ethernet Adapter – TP/FT-10 (9VDC) – UK Plug	72010R-3
i.LON 10 Ethernet Adapter - TP/FT-10 (9VDC) - Japan Plug	72010R-4

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