ECHELON®

PCLTA-10 ISA LonTalk® Adapter
Models 73401, 73402, and 73403

▼ Half-length, 16-bit ISA card for LONWORKS® networks

▼ Plug-and-play capability with Microsoft® Windows® 95/98/2000 and Windows NT®

▼ Downloadable firmware allows updates without accessing or changing hardware

▼ Integral FTT-10A, RS-485, TPT/XF-78, or TPT/XF-1250 transceiver

▼ LNS network services interface (NSI) supports LNS applications

▼ CE Mark, U.L. Listed, cU.L. Listed
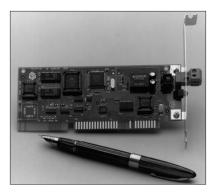
▼ Network driver for Windows 95/98/2000 and Windows NT available

Description

The PCLTA-10 Industry Standard Architecture (ISA) LonTalk Adapter is a high-performance LONWORKS interface for personal computers equipped with a 16-bit interface and a compatible operating system. Designed for use in LONWORKS control networks that require a PC to monitor, manage, or diagnose the network, the PCLTA-10 adapter is ideal for industrial control, building automation, and process control applications. The PCLTA-10 adapter features an integral twisted pair transceiver, downloadable memory, a network management interface, and plug-and-play capability with Microsoft Windows 95/98/2000 and Windows NT.

The PCLTA-10 adapter provides both LNS network services interface (NSI) functionality for use with LNS tools, and Microprocessor Interface Program (MIP)-compatible network interface functionality for use with LonManager® API-based tools.

Installation software for the PCLTA-10 adapter is provided with the LonMaker™ Integration Tool, LNS™ DDE Server, and LNS Application Developer's Kit software distributions, or may be downloaded from the developer's tool box section of the Echelon web site. It includes a software-based control panel and a software driver for Microsoft Windows 95/98/2000 and Windows NT. The control panel provides a convenient means of setting and modifying installation parameters, diagnosing card operation, and displaying error messages. The adapter supports plug-and-play operation, simplifying installation.

The LNS network operating system allows any number of installation, maintenance, monitoring, and control devices to exist in a system and to adapt to network configuration changes automatically. Users can reconfigure the system from any user interface device anywhere on the network and ensure that all monitoring and control stations are always up-to-date with

respect to the system's configuration. When used with the appropriate software, the LNS network services interface (NSI) functionality of the PCLTA-10 adapter allows the attached host to run LNS applications.

In both NSI mode and MIP modes, the adapter also permits the host PC to act as a LONWORKS application device, running application-specific programs while the adapter handles lower layer functions such as media access control, collision avoidance, message validation, authentication, and priority processing. The host application, including its network variables, can be changed at any time without modifying the adapter. The PCLTA-10 adapter combined with the host PC can also be used with applications that require more processing power, memory, input/output capability, or network variable connections than are provided by the Neuron® Chip alone.

Firmware for the adapter is downloaded from the host PC. This allows the adapter to be updated as new versions of the software and firmware are released, without modifying or physically accessing the PCLTA-10 adapter. This feature extends the useful service life of the adapter, and minimizes the cost and time associated with software and firmware updates.

Specifications

Processor	Neuron 3150® Chip
Processor Input Clock	10MHz
Network Connector	Weidmüller 2-conductor BLA
Operating Input Voltage	+5VDC ±5%
Operating Input Current	250 mA typical
PC Bus Interface	16-bit ISA slot, half-length, half-height
Neuron Chip Service Pin Function	Service pin message controlled by host application
Configuration State	Displayed on host
Temperature	
Operating	0 to +70° C
Non-operating	-45° to +85° C
Humidity (non-condensing)	
Operating	25 to 90%RH @ 50° C
Non-operating (12 hour)	95%RH @ 50°C
Dimensions	154.9mmW x 62.2mmL (6.10"W x 2.45"L)
EMI	FCC Part 15 Level B and EN55022 Level B
Listings	U.L. 1950, cU.L.1950, TÜV EN60950, CE Mark

Documentation

The LONWORKS PCLTA-10 PC LonTalk User's Guide may be downloaded from Echelon's web site or ordered from Echelon's literature fulfillment department.

Document	Echelon Part Number
LONWORKS PCLTA-10 PC LonTalk User's Guide	078-0159-01

Ordering Information

Product	Echelon Model Number
PCLTA-10 Adapter - TP/FT-10A	73401
PCLTA-10 Adapter - TP/XF-78	73402
PCLTA-10 Adapter - TP/XF-1250	73403

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