General Description

U10 USB Network Interface – TP/FT-10 Channel

U20 USB Network Interface – PL-20 Channel

The U10 and U20 USB Network Interfaces are low-cost, high-performance LonWorks interfaces for USB-enabled PCs. The U10 USB Network Interface connects to a TP/FT-10 Free Topology Twisted Pair (ANSI/CEA-709.3) LonWorks channel through a removable connector, and is fully compatible with link powered channels. The U20 USB Network Interface connects to a PL-20 Power Line (ANSI/CEA-709.2) LonWorks channel through a wall plug coupling circuit/power supply (included). The U20 interface may also be connected directly to 10.8-18 Vdc power lines without a coupling circuit, or to virtually any powered line with a customer-supplied coupling circuit/power supply.

The U10 and U20 interfaces are ideal for industrial control, building automation, process control, home automation, and transportation applications. The interfaces feature easy-to-install, auto-configuring drivers for Microsoft Windows XP, 2000, and Server 2003, and are compatible with LNS 3 and Turbo Edition applications, including the LonMaker® Integration Tool. When used with LNS 3 or LNS Turbo Edition, the U10 and U20 interfaces function as LNS High Performance Network Interfaces – you get the highest possible performance at the lowest cost in the market. Apart from the superior performance when used with LNS, the U10 and U20 interfaces are compatible with OpenLDV based applications, as well as the LonScanner Protocol Analyzer.

Models 75010R, 75110R, and 75021R are compliant with the European Directive 2002/95/EC on the restriction of the se of certain hazardous substances (RoHS) in electrical and electronic equipment.

The U10 and U20 interfaces are certified USB 2.0 compatible by the USB Implementers Forum. In addition, the U10 and U20 interfaces carry the *Designed for Windows XP* logo compatibility certification.

A 60-cm USB extension cable is included with both the U10 and U20 interfaces, to allow for easy connection in various laptop and desktop environments. An optional 3-meter cable accessory is available for the U10; this cable accessory allows easy network connection between the U10 and LonPoint® Routers, the MPR-50 Multi-Port Router, and the numerous third-party devices that implement the 3.5-mm mono phone plug standard.

Installation software and a user's guide are included on the CD-ROM, and may also be downloaded from Echelon's Web site.

Features

- Low-cost USB to LonWorks® (ANSI/CEA-709.1) network interface
- Free topology twisted pair (TP/FT-10) and power line (PL-20 C-Band) LonWorks channel support
- Highest possible network throughput and performance
- Rugged design, removable connectors
- Plug-and-play drivers for Windows XP, 2000, and Server 2003
- Functions as an LNS® High Performance Network Interface when used with LNS 3 and LNS Turbo Edition
- Compatible with OpenLDV™ applications and the LonScanner™ Protocol Analyzer
- CE, UL, cUL, and TÜV

Specifications	
Transceiver	U10 Interface: TP/FT-10 (ANSI/CEA-709.3 and LonMark standard channel type); link power compatible U20 Interface: PL-20 (ANSI/CEA-709.2 and LonMark standard channel type); EN50065.1 C-Band protocol software configurable
Network Connector	U10 Interface: Removable spring clamp and screw terminal connectors included U20 Interface: 2.1-mm barrel connector with positive tip. Wall plug coupling circuit/power supply included. May be connected directly to 10.8-18 Vdc power line, or to customer-supplied coupling circuit/power supply.

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Specifications continued	
Optional Cable Assembly (U10 Interface)	3-meter cable with 3.5-mm mono phone plug and spring clamp connector
Operating Input Voltage (U20 Interface)	10.8-18 Vdc at 2.1-mm barrel connector; powered line voltage varies with application
Operating Input Current (U20 Interface)	250 mA maximum @ 18 Vdc
Operating Input Current (USB)	50 mA maximum @ 5 Vdc
LED Indicators	Service (amber), Transmit (green), Receive (green)
Temperature Operating Non-Operating	 0 °C to +70 °C -20 °C to +85 °C
Humidity Operating (Non-Condensing) Non-Operating (Non-Condensing)	 25 to 90% RH @ +50 °C 95% RH @ +70 °C
Shock and Vibration	ETSI300 019-2-3 T3.2
Dimensions	18.2 mm High x 113.2 mm Long x 22.4 mm Wide
EMC	FCC Part 15 Level B, EN55022 Class B, EN55024, CISPR 22 Class B, VCCI Class B
Agency Listings	UL 60950, cUL C22.2 No. 60950-00, TÜV EN60950, CE, C-Tick

Ordering Information

25123	U	-10
Part Number	USB Interface	USB Interface

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