

Overview

The PRONTO series of products are the third generation of compact free space laser based systems from LaserByte designed to deliver easy-to-use and cost-effective solutions for high speed wireless connections. The applied technology is based on the highly successful PICO and PINTO series products compact mechanical design. In addition PRONTO systems are enhanced with new, state of the art features such as Automatic Inbound Power Control. PRONTO systems can be ordered with IP based SNMP compatible device management that allows remote control and monitoring of the equipment. These attributes make the PRONTO the best value mid-range FSO product on the market. Because they use infrared light as transmission medium, LaserByte systems do not require frequency licenses and the transmission is not affected by electro-magnetic interference. The concentrated laser beam is extremely hard to tap and even harder to detect. The transparent and wire speed data transfer together with virtually zero latency assures the easy integration of the system in all environments.

Product Description

The LaserByte PRONTO system comprises of two Laser Heads, two Outdoor Interconnection Units (OIU) and two sets of interconnection cables one at each end. The Laser Heads are installed outdoors, where a clear optical path exists between the two sites. Next to the head the Outdoor Interconnection Unit provides fast and easy interconnection between the laser head and the cable coming from the network equipment. The OIU houses the Power Supply Unit (PSU) of the system and the network interface. The PSU provides the low voltage power required to operate the laser head while the data port offers direct connectivity for standard network equipment.

A variety of standard copper and fiber interfaces are available for voice and data applications. The system contains a built-in signal monitoring unit, which features a visual signal strength indicator and LINK status information accessible on the rear of the head assembly. The optional IP Based Management Hardware is placed in an Indoor Interconnection Unit (IDU). The bar graph of the IDU displays the actual signal strength level while the LED indicators show the presence of minor or major alarm condition . With the help of the relay contacts an external alarm monitoring equipment may be connected to the system to further process the alarm signals. Additionally, LaserByte's ByteView software allows the monitoring of the link's operation through a proprietary graphical interface (GUI) via Ethernet or RS-232 ports or a third party SNMP manager via TCP/IP connection.

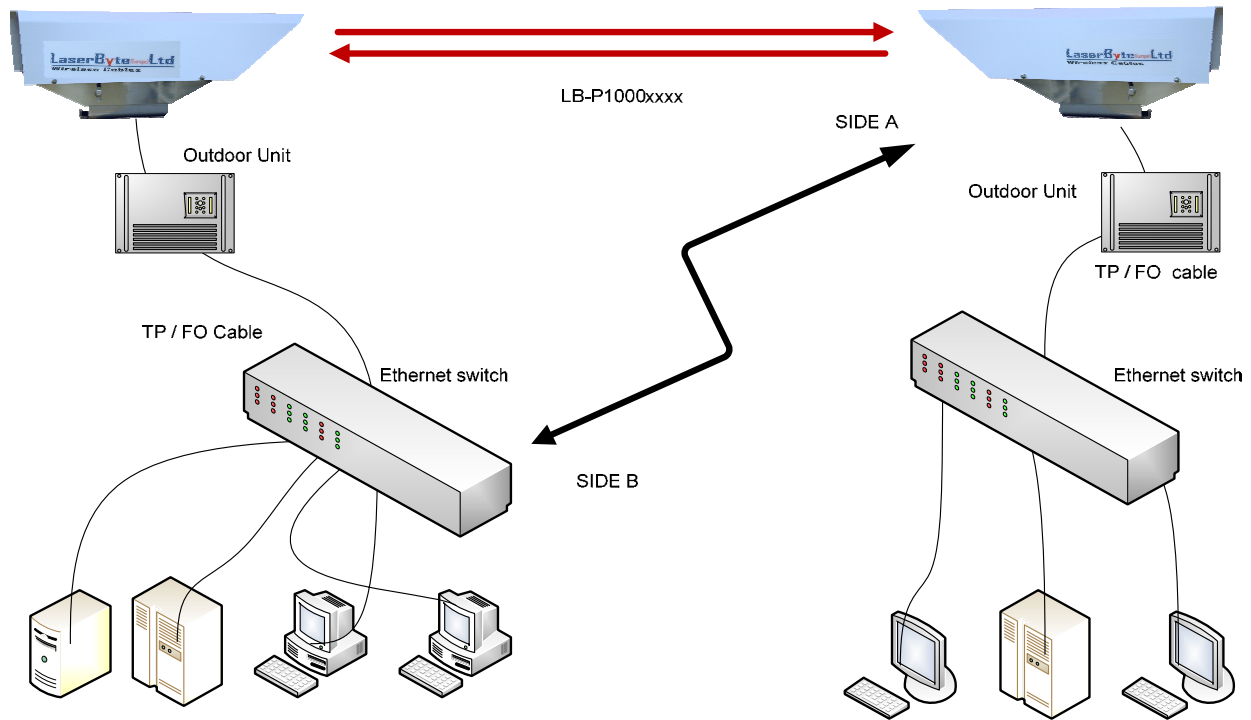


Key Features:

- Free Space, Wireless Communication
- Compact System Design
- Full Duplex Wire Speed Connectivity
- Wide Selection of Industry Standard Interfaces
- Secure Data Transmission
- Transparent Operation
- Quick Installation & RE-DEPLOYMENT
- Built-in Signal Monitoring

Applications:

- Replace lower speed leased lines or radio links
- Interconnect LANs in campus or industrial environment
- PABX to PABX connection
- High bandwidth connection to the Internet
- VOIP Application
- Temporary Installation
- Emergency Back-up



LaserByte Pronto

Laser Based Free Space Optical Communication System

ELECTRICAL CHARACTERISTICS

Light Source	Laser Diode
Laser Diode Power	2x70mW
Detector	Si APD Photodiode
Dynamic Range	>40 dB
Bandwidth	1-155 Mbps
BER	<10 ⁻⁹
System Latency	<50 ns

DATA IN/OUT

Fast Ethernet	100BaseTX RJ 45 socket
E1 4xE1 and 16 xE1 series	MM fiber between the head and IDU, 75 Ohm BNC (unbalanced) and 120Ohm RJ-45 (balanced) for G.703 connection on the IDU
E1/100 series	MM fiber between the head and IDU, 75 Ohm BNC and 120 Ohm RJ-45 for E1 G.703 and RJ-45
Transparent Channel, ATM 155	62.5/125 MM fiber at 1300 nm with SC connectors (SM optional)

POWER

Power Required	230VAC, 50W max. (110VAC and 48VDC optional)
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ENVIRONMENT

Operating Temperature	-25 to +60 Centigrade
Storage Temperature	-40 to +80 Centigrade
Humidity	95% non condensed
Protection Rating	IP65

PHYSICAL CHARACTERISTICS

Head Housing	Aluminium Alloy
Weight	18 kgs
Dimensions (with cover and	560 x 289 x 217

OPTICAL CHARACTERISTICS

Wavelength	785 nm
Beam Divergence	0.5 - 15 mrad
Receiver acceptance angle	8.5 mrad

ORDERING INFORMATION

LB-P1000-TP100	LaserByte LINK with Fast Ethernet (100BaseTX) interface. Max 1000 m distance between heads.
LB-P1000-TC100	LaserByte LINK, Up to 100 Mbit/sec MM fiber optic I/F with SC connector. Max. 1000 m distance between
LB-P1000-ATM155	LaserByte LINK, 155 Mbit/sec MM fiber optic I/F with SC connector. Max. 1000 m distance between heads.
LB-P1000-E1	LaserByte LINK+LE-E1-1300M/1E1 LINK (2 Mbps G.703 balanced & unbalanced. Max. 1000 m distance
LB-P1000-4E1	LaserByte LINK+LE-E2-1300M/4E1 LINK (4x2 Mbps G.703 balanced & unbalanced. Max. 1000 m distance
LB-P1000-16E1	LaserByte LINK+LE-E3-1300M/16E1 LINK (16x2 Mbps G.703 balanced & unbalanced. Max. 1000 m distance between heads)
LB-P1000-E1/100	LaserByte LINK + LE-COMB-E1/100/1300M LINK (G.703 + 100BaseTX. Max. 1000 m

Complete link management solution with PC based graphical interface and SNMP agent up to 8 links. See pricelist for full list of optional items.



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To The Home And Office

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