LaserBit **PICOPLUS** Series

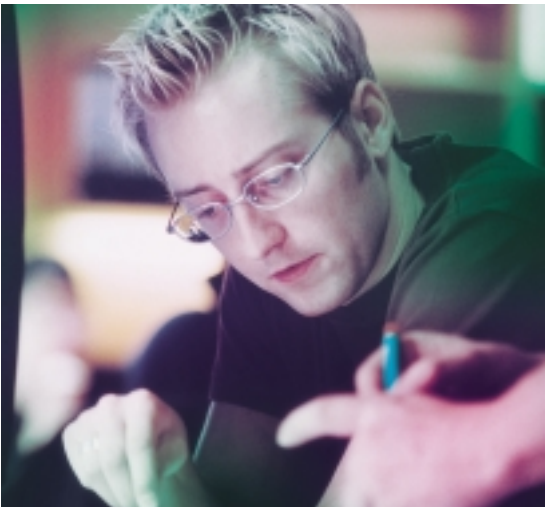
Laser Based Free Space Optical Communication System

Features:-

- Free Space, Wireless Communication
- Full Duplex Wire Speed Connectivity
- Industry Standard Fast Ethernet interface
- Power on Ethernet - No additional power required
- Secure Data Transmission
- Lightweight, Compact Design
- Quick Installation and Redeployment
- Transparent Operation
- Class 1M Laser

Applications:-

- Replace lower speed leased lines or radio links
- Interconnect LAN's in campus or industrial environment
- PABX to PABX connection
- High bandwidth connection to the Internet
- VoIP applications
- Temporary installations
- Emergency backup



Product Overview

The PICO series products are short distance, high speed and cost effective Free Space Optical transmission systems from LaserBit. PICOPLUS is the latest version of the series enhanced by a PoE (Power over Ethernet) feature, which eliminates the need for separate power cabling by delivering the power using the UTP data cable. PICOPLUS can be connected to any PoE compliant network equipment or any standard Ethernet port through a PoE injector device. Its lightweight, compact mechanical design with a factory-set optical system and the simple cabling requirement makes PICOPLUS the simplest and easiest to install FSO product on the market. PICOPLUS provides wire speed and full duplex Fast Ethernet laser based wireless connectivity up to 200m. The brand new transmitter optical system makes the product Class 1M compliant without compromise on the weather performance.

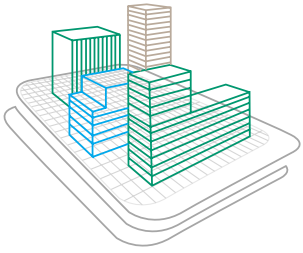
The "management ready" versions of PICOPLUS solutions can be enhanced with LBView, a device management platform that allows remote control and monitoring of the equipment through a standard web browser or SNMP manager or LaserBit's proprietary BitView GUI interface. The transparent and wire speed data transfer together with virtually zero latency ensures easy integration of the system into any environment. Because they use infrared light as a transmission medium, LaserBit systems do not require frequency licenses and the transmission is not affected by electro-magnetic interference. The concentrated laser beam is extremely hard to intercept, even to discover as it cannot be detected by spectrum analysers or similar instruments. **The LaserBit link is a virtual fiber in the air.**

Product Description

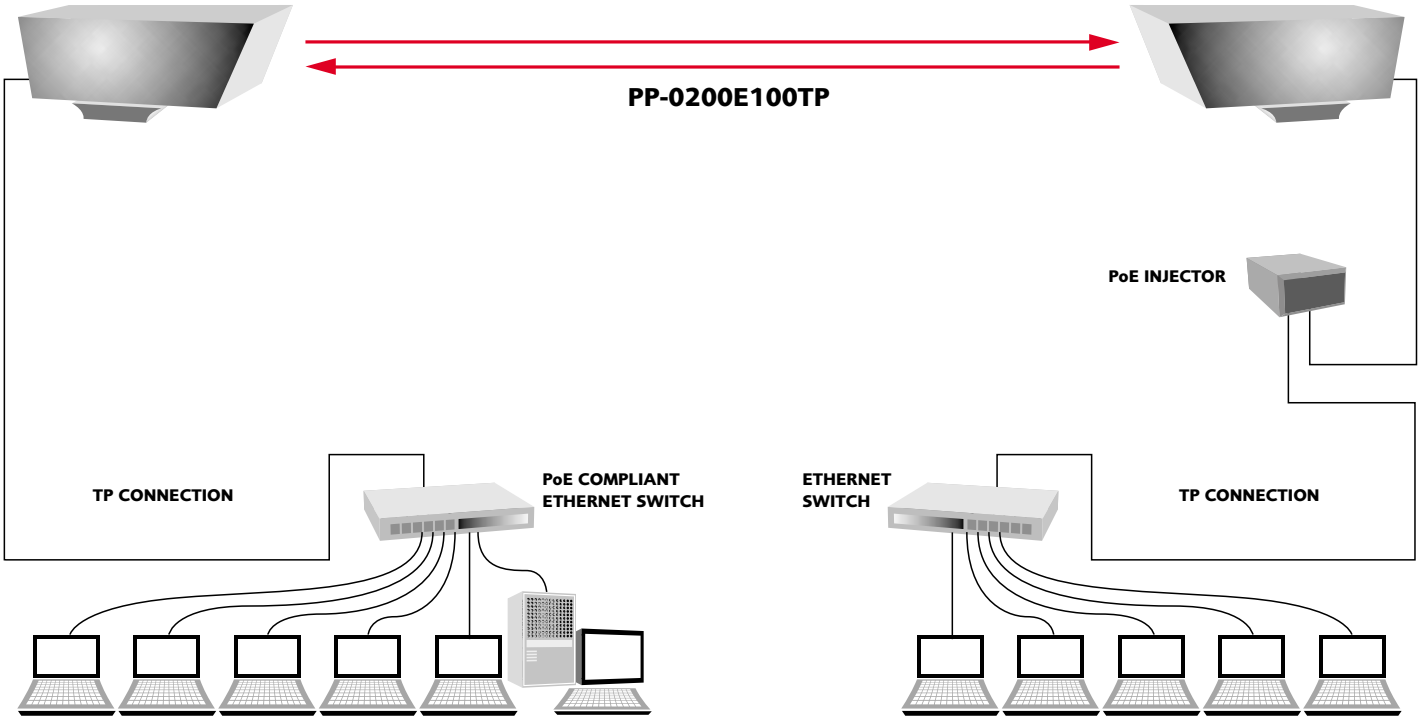
One LaserBit PICOPLUS system comprises of two Laser Heads — one at each end. The Laser Heads are installed outdoors, usually on rooftops or sidewalls of buildings, where a clear optical path exists between the two sites. The laser heads contain a built-in signal monitoring feature, which provides visual signal strength indication and LINK status information accessible on the rear of the head assembly. The PoE compliant network equipment can be connected directly to the laser head using a Cat 5 UTP cable. Alternatively, any port of standard network devices can be enhanced by an external PoE injector making the direct connection to PICOPLUS possible. No other hardware or software is required for a fully functional connection! PICOPLUS systems are also available in "management ready" versions which, enhanced with LaserBit's LBView allow remote control and monitoring of the equipment. The LBView Unit is equipped with status indicators that give an overview of the current FSO device status in blink of an eye. The built-in web server functionality provides user friendly one click device management while the SNMP interface enables easy migration with existing network management systems. When supplemented with BitView, it offers enhanced data security and convenient graphical based management of the connected devices. With the enhanced features supporting simple and fast installation and trouble-free operation PICOPLUS delivers the best price/ performance on the market today.

Investment Protection

By utilizing the most popular copper based industry standard compliant interfaces LaserBit system protects the customers' investments in long-term projects. The most important feature of LaserBit's PICOPLUS system is the quick and easy installation process. The alignment of the equipment is very simple, and the network connection can be established in any environment within an hour without cabling.



LASERBIT
WIRELESS CABLES



LaserBit **PICOPLUS** Series - Technical Specifications

ELECTRICAL CHARACTERISTICS

Light source	Laser Diode
Laser diode power	70 mW
Laser Class	1M
Detector	Si PIN
Dynamic range	>25 dB
Bandwidth	100 Mbps
BER	< 10^{-9}
System latency	< 50 ns

ENVIRONMENT

Operating temperature	- 25 to + 60 Centigrade
Storage temperature	- 40 to + 80 Centigrade
Humidity	95% non condensed
Protection rating	IP65 for Head Assembly

DATA IN / OUT

Fast Ethernet	100BaseTX RJ-45 socket

POWER

Power required	IEEE 802.3af compliant device

PHYSICAL CHARACTERISTICS

Head Housing	Stainless Steel
Weight	4.5 kg
Dimensions (with cover and Alignment Unit, mm)	160 x 110 x 350

OPTICAL CHARACTERISTICS

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

ORDERING INFORMATION

PP-0200E100TP	LaserBit PICOPLUS LINK with Fast Ethernet (100BaseTX) I/F and PoE. Maximum 200 m distance between heads.
PP-0200E100TP/M	LaserBit PICOPLUS LINK with Fast Ethernet (100BaseTX) I/F and PoE. Management ready. Max. 200 m distance between heads.

LASERBIT WIRELESS CABLES