

LaserBit PINTOPLUS Series

Laser Based Free Space Optical Communication System

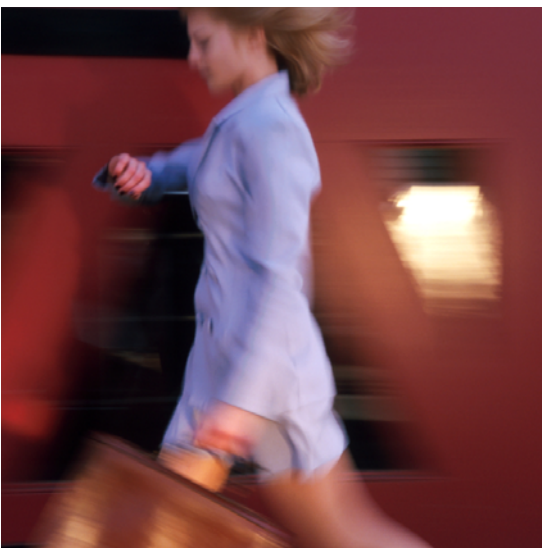


Features:-

- 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 Operation

Applications:-

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



Product Overview

PintoPlus series products are high speed and cost effective Free Space Optical transmission systems from LaserBit. They provide wire speed and full duplex Fast Ethernet laser based wireless connectivity up to 500m. PintoPlus is a member of LaserBit's second generation compact product portfolio dubbed as the "Plus" series and — similarly to other "Plus" family members — is enhanced by Class 1M optical system and PoE (Power over Ethernet) feature, which eliminates the need for separate power cabling by delivering the power using the UTP data cable. PintoPlus 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 PintoPlus the simplest and easiest to install FSO product on the market.

The brand new transmitter optical system makes the product Class 1M compliant without compromise on the weather performance. PintoPlus systems 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.**

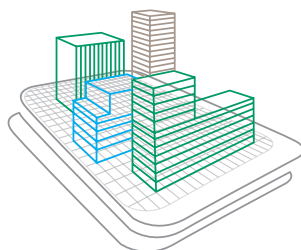
Product Description

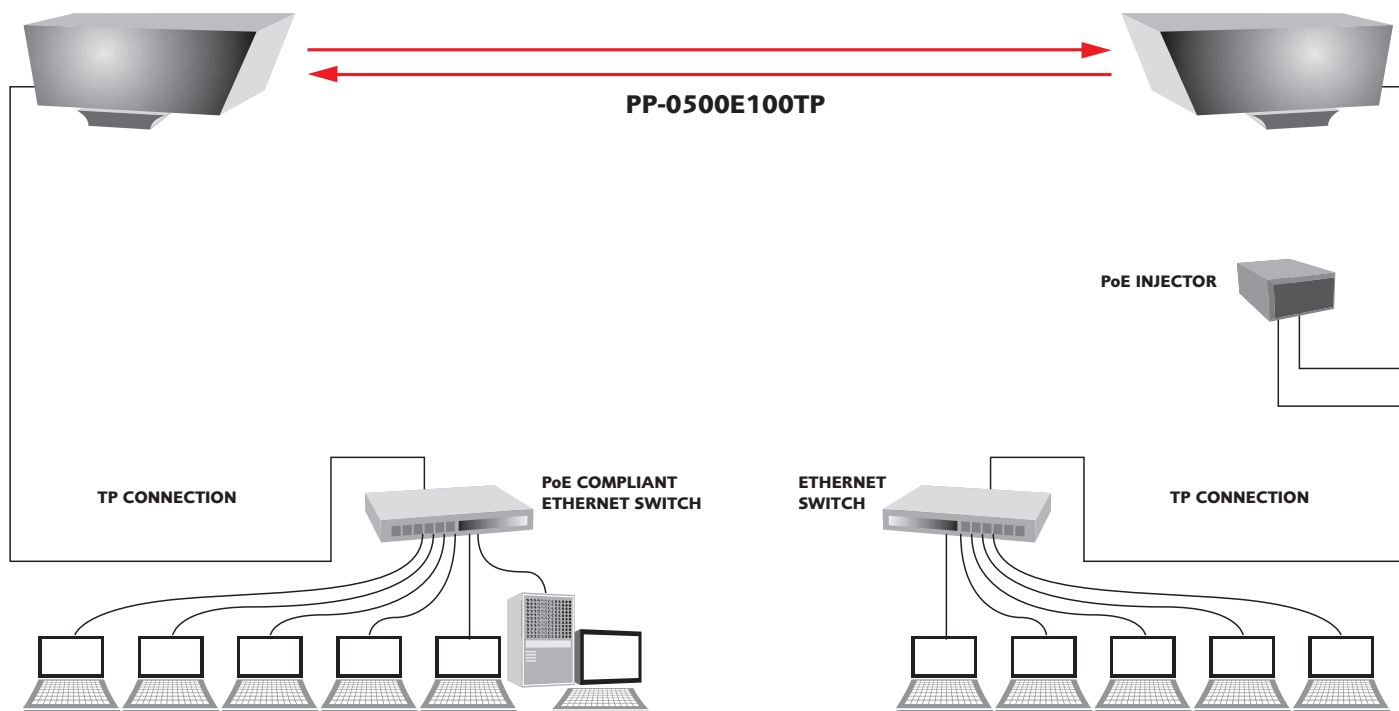
One LaserBit PintoPlus system comprises of two Laser Heads — one at each end. The Laser Heads are installed outdoors, usually on rooftops or sidewalls of buildings, where a clear optical path exists between the two sites. The laser heads contain a built-in signal monitoring feature, which provides visual 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 PintoPlus possible. No other hardware or software is required for a fully functional connection! PintoPlus systems can be enhanced with LaserBit's LBView product, which allows 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 the 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 troublefree operation PintoPlus 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 features of PintoPlus system are the simplicity, easiness and rapidity of the installation process. PintoPlus does not require separate power cabling and the alignment of the equipment is very simple.





PP-0500E100TP

TP CONNECTION

PoE COMPLIANT
ETHERNET SWITCH

ETHERNET
SWITCH

PoE INJECTOR

TP CONNECTION

LaserBit PINTOPLUS Series - Technical Specifications

ELECTRICAL CHARACTERISTICS

Light source	Laser Diode
Laser diode power	70 mW
Detector	APD Photodiode
Dynamic range	>30 dB
Bandwidth	100 Mbps
BER	< 10 ⁻⁹
System latency	< 50 ns

PHYSICAL CHARACTERISTICS

Head Housing	Stainless Steel
Weight	6.5 kg
Dimensions (with cover and Alignment Unit, mm)	485 x 216 x 200

ENVIRONMENT

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

POWER

Power required	IEEE 802.3af compliant device
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DATA IN / OUT

Fast Ethernet	100BaseTX, RJ-45 socket
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OPTICAL CHARACTERISTICS

Wavelength	785 nm
Laser Class	1M
Beam divergence	0.5 - 15 mrad
Receiver acceptance angle	8.5 mrad

ORDERING INFORMATION

PP-0500E100TP	LaserBit PintoPlus LINK with Fast Ethernet (100BaseTX) I/F and PoE. Maximum 500 m distance between heads.
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ORDERING INFORMATION

LBView	Management Indoor Unit with built in HTTP server and SNMP Agent (per HEAD)
BitView	IP based graphical management platform (Windows2000, Windows NT 4.0, Windows XP)



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