

LaserBit PLUTOmobility

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
- Ultra lightweight, Compact Design
- Quick Installation and Redeployment
- Transparent Operation

Applications:-

- Replace lower speed leased lines or radio links
- In-room or across the street interconnection of network devices or LAN segments
- High bandwidth connection in EMI intense areas
- VoIP applications
- Temporary installations
- Emergency backup



Product Overview

LaserBit's Pluto series of products revolutionizes wireless communications by offering high speed and secure laser based Free Space Optical connectivity at an unbeatable price-performance ratio. The PlutoMobility provides wire speed and full duplex Fast Ethernet wireless connectivity up to 20m for indoor and "across the street" applications through windows. PlutoMobility features industry standard 100BaseTX interface with PoE (Power over Ethernet) capability, which eliminates the need for separate power cabling by delivering the power using the UTP data cable. PlutoMobility links can be connected to any PoE compliant network equipment or any standard Ethernet port through a PoE injector device.

The ultra lightweight, compact mechanical design with wide angle optical system makes PlutoMobility easier to install than any other wireless solution. Besides the visual status indicators PlutoMobility systems also include a buzzer to provide audio assistance for the alignment. 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 electromagnetic 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 PlutoMobility system comprises of two Laser Heads, one at each end. The Laser Heads have to be installed in places 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 PlutoMobility links possible. No other hardware or software is required for a fully functional connection!

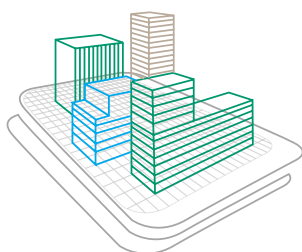
The LBView Unit is equipped with status indicators that give an overview of the current FSO device status in the blink of an eye. The built-in web server functionality provides user friendly one click device management while the SNMP interface enables easy migration with existing network management systems. With the enhanced features supporting simple and fast installation and trouble-free operation LaserBit's PlutoMobility delivers the best price/ performance on the market today.

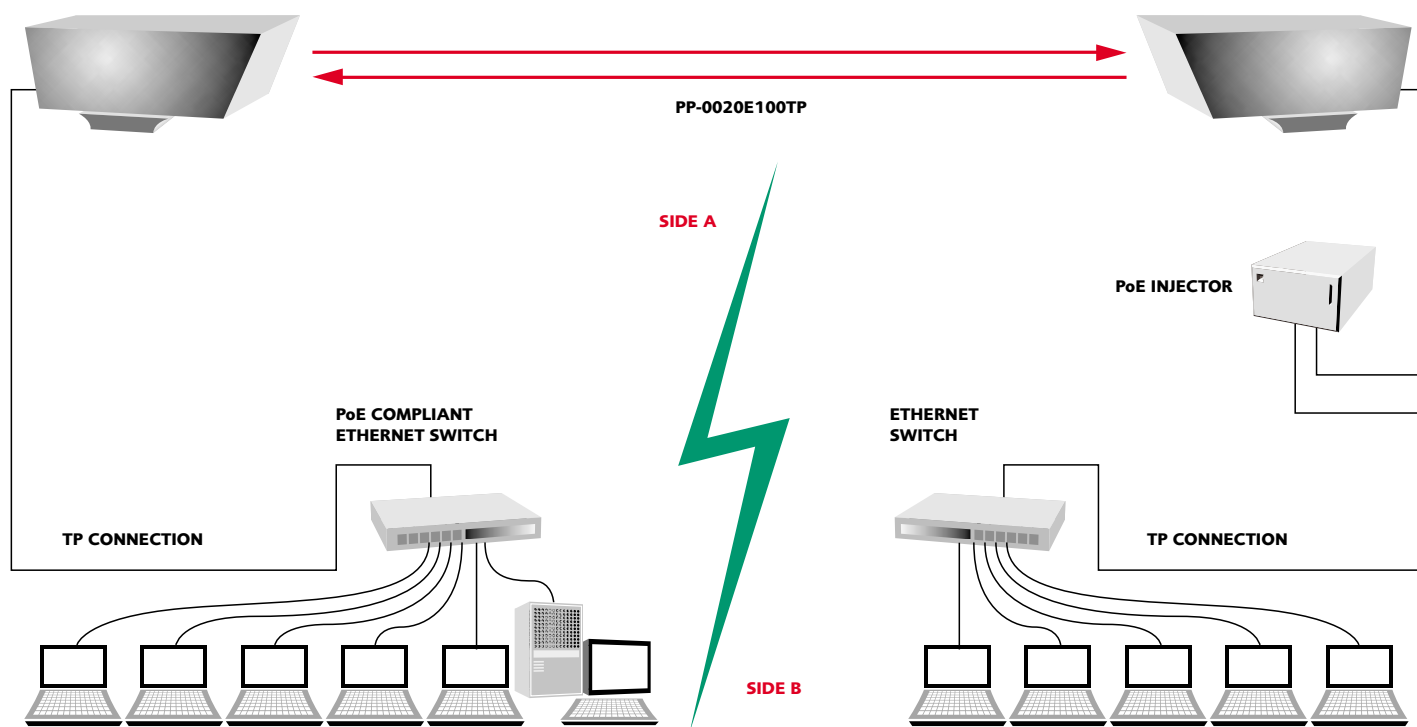
Investment Protection

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 PlutoMobility are the simplicity, easiness and rapidity of the installation process. PlutoMobility does not require separate power cabling and the alignment of the equipment is very simple.





LaserBit PLUTOmobility Series - Technical Specifications

ELECTRICAL CHARACTERISTICS

Light source	Laser Diode
Laser diode power	70 mW
Detector	Si PIN Photodiode
Dynamic range	>12 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	IP20

DATA IN / OUT

Fast Ethernet	100BaseTX, RJ-45 socket
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POWER

Power required	IEEE 802.3af compliant device
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PHYSICAL CHARACTERISTICS

Head Housing	Stainless Steel
Weight	2.5 kg
Dimensions (with cover and Alignment Unit, mm)	172 x 124 x 149

OPTICAL CHARACTERISTICS

Wavelength	785 nm
Beam divergence	100 mrad
Receiver acceptance angle	100 mrad

ORDERING INFORMATION

PP-0020E100TP	LaserBit PlutoMobility LINK with Fast Ethernet (100BaseTX) I/F and PoE. Maximum 20 m distance between heads.
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