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Black Box Corporation.

BLACK BOX[®]

NETWORK SERVICES

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LASERLINK POWER OVER ETHERNET



Key Features

- ▶ *Licence free connection*
- ▶ *Full Duplex Wire Speed Connectivity*
- ▶ *Power Over Ethernet - No additional power required*
- ▶ *Rapid Installation and redployment*
- ▶ *Standard Fast Ethernet Installation*
- ▶ *Robust and Weatherproof*
- ▶ *Class 1M operation*

Fast and Easy to install

This latest addition to the LaserLink series of products from BLACK BOX, are designed to be even easier to install with the feature of Power Over Ethernet. Based on the highly successful compact mechanical design of the LaserLink Fast Ethernet series these systems eliminate the need for a separate external power source for the Laser

heads. They provide wire speed and full duplex Fast Ethernet laser based wireless connectivity up to 500m.

Power is supplied via the UTP Ethernet cable from any device with an 802.3af standard interface or by means of a standards based power injector. These LaserLink systems are enhanced with new, state of the art features that ensure not only the highest performance but also

make them the best value FSO products on the market. The brand new transmitter optical system makes the product Class 1M compliant for complete eye safety without compromise on the outstanding weather performance.

Complete Solution

Simple to install, easy to operate and manage as well as safe to use, a Black Box link is a virtual fibre in the air. 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, Black Box LaserLink systems do not require frequency licenses and the transmission is not affected by electro-magnetic interference. The concentrated laser beam is extremely hard to discover and then intercept as it cannot be detected by spectrum analysers or similar instruments.

The Black Box LaserLink Power

Over Ethernet systems comprise of two Laser Heads together with the mounting brackets and fixing required. The LaserLink 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 indication of signal strength and LINK status information. This display is accessible at the rear

of the head assembly to assist easy set up. Any 802.3af PoE compliant network equipment can be connected directly to the laser head using a Cat 5 UTP cable. Alternatively, any port of a standard network device can be enhanced by means of an external PoE injector allowing the direct connection to a LaserLink Power Over Ethernet model. No other hardware or software is required for a fully functional connection!

Specifications

Connections:

LAN Interface - 100BASETX, RJ-45 Socket , 802.3af compliant

Management:

Indicators - Power, Optimum Level Link, Receiver Saturation, Receiver Status, Dynamic signal level LED array

Engine (Laser):

Light Source - Laser Diode, 785nm wavelength
 Laser Diode Power - 70mW, Optical output Class 1M
 Detector - SiPIN-model LWU0200-TP-PLUS APD Photodiode-model LWU0500-TP-PLUS
 Dynamic Range - >25dB-model LWU0200-TP-PLUS >30dB-model LWU0500-TP-PLUS
 Beam Divergence - 0.5-15 mrad

Receiver Acceptance Angle - 8.5 mrad
 Nominal Range - LWU0200-TP-PLUS - 200m LWU0500-TP-PLUS - 500m

Operating Environment:

Operating Temperature - -25 to +60 degrees Centigrade
 Storage Temperature - -40 to +80 degrees Centigrade
 Humidity - 95% non condensing
 Protection Rating - IP65 for Head and Outdoor Unit
 Power: Via Interface - 802.3af standard compliant
 Dimensions - LWU0200- 160 x 110 x 350mm, weight - 4.5 kg
 LWU0500 - 485 x 216 x 175mm, weight - 6.5 kg

▼ Ordering Information

ITEM	CODE
LaserLink, Power Over Ethernet, 200 metre.....LWU0200-TP-PLUS
LaserLink, Power Over Ethernet, 500 metre.....LWU0500-TP-PLUS