



# 4th Generation Free Space Optics Wireless Bridges

The AireLite™ Series includes LightPointe's best selling point-to-point solutions, providing the industry's highest level of value/ROI and robust performance. These bridges are one of the reasons LightPointe is the #1 manufacturer of Free Space Optics since 1998. The AireLite 100 (distances up to 700 meters) and 100E (up to 1000 meters) are easy to install and extremely reliable in most regions, even in rain and snow. And if your organization is concerned about wireless data security, optical transmission provides the only true Point-to-Point wireless data transmission, and is impossible to successfully intercept.

The AireLite 100 and 100E incorporate LightPointe's 4th generation FSO technology and, best of all, are license-free worldwide and immune to RF interference and congestion. These advanced wireless Ethernet bridges have been successfully deployed in hospital, school and business campuses, handling data and digital video transmission.

## **Applications**

- Campus/building connectivity for schools, businesses, government buildings and hospitals.
- · 3G/4G Small Cells/Picocells for mobile backhaul.
- Disaster recovery/emergency communications restoration.
- Digital video, HDTV and surveillance connectivity.
- · Remote storage access.
- · Temporary connections for special events.
- · Mesh and Multipoint infrastructure.
- · Local Area Network extension.
- Military theater of operations and base connectivity.
- Homeland security.

## **Advanced 4th Generation FSO Features**

- Cost effective high speed full-duplex 100 Mbps connectivity up to 1000 meters (@17dB/km).
- License-free worldwide. No initial or recurring regulatory fees or delays, no leased lines and no RF interference.
- Pin-point optical beam can't be successfully intercepted and is immune to RF interference/congestion.
- Easy installation via Power over Ethernet (does not require special electrical connections).
- Green technology: Less than 20W power consumption and no RF radiation.
- · Web-browser-based and SNMP management/alarms.
- Latency: 50 microseconds or less.
- Intuitive AireManager<sup>™</sup> Web interface allows links to be configured and monitored from a network computer.

**AIRELITE 100 & AIRELITE 100E SYSTEM SPECIFICATIONS** 

Description Fixed Optics System

Receiver/Transmitter(s)

One transmitter, one receiver

Optical Transmitter VCSEL Free-Space Wavelength 850 nm Optical Receiver Si APD

Distance (@17 dB/km) AireLite 100: up to 700m; AireLite 100E: up to 1000m

Receive Power Indicator 10-level bar graph

Dimensions (WxHxL) 215 x 200 x 400 mm (8.5 x 7.9x 15.75 in) Unit Weight 1 FSO unit/link head: 9.9 lbs (4.5kg)

Shipping Weight/Dimensions

Box A: 2 FSO units/link heads: 23 lbs (11kg); 30"(.762m) x 23"(.584m) x 12"(.304m)

Box B: 2 Mounts, Pan/Tilt, PoE injectors: 46 lbs (21kg); 33"(.838m) x 17"(.431m) x 12"(.304m)

Operating Voltage Passive PoE injector (4,5+; 7,8 -) or direct +48 Vdc

Alignment System Heavy duty Pan/Tilt alignment bracket

Operating Temperature -30 C to 60 C (-22 F to 140 F)
Humidity Range Up to 95% non-condensing

Power Consumption Max
Built-In Alignment Telescope
Built-In Defroster
Yes

#### LAN NETWORKING INTERFACES

Protocol/Data Rate 100-Base-TX Ethernet, auto full-duplex 100Mbps

Data Connector Copper RJ-45
Management Connector Copper RJ-45
Terminal Connector RJ-12

Others Link Pass Through enable/disable

### REGULATORY

EMC Optical Wireless: FCC PART 15, CE Mark RF: FCC Part 15.247, IC RS210, CE MARK Laser Safety Eyesafe Class 1M laser product (IEC/EN 60825-1/A2)

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