

4th Generation Free Space Optics Wireless Bridge

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 G is easy to install and has a track record of excellent reliability — even in very challenging climate environments. And if your organization is concerned about wireless data security, optical transmission systems are considered the most secure point-to-point communications solutions available and are virtually impossible to intercept.

The AireLite G incorporates LightPointe's 4th generation GigE FSO technology and, best of all, is license-free worldwide and immune to RF interference and congestion. This advanced wireless Ethernet bridge has 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.
- · 4G/LTE Small Cells/Picocells for mobile backhaul.
- Disaster recovery/emergency communications restoration.
- · Digital video and video 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

- High speed full-duplex 1.25 Gbps/Gigabit connectivity up to 600 meters (@17 dB/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 (Power over Ethernet).
- Green technology: Less than 20W power consumption and no RF radiation.
- · Standard copper or optional fiber network interfaces.
- Web-browser-based and SNMP management/alarms.
- · Latency less than 50 microseconds.
- Intuitive AireManager[™] Web interface allows links to be configured and monitored from a network computer.

AIRELITE G 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 (@17dB/km) Up to 600m

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 4.5 kg (9.9 lbs)

Unit Shipping Weight

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 20W
Built-In Alignment Telescope Yes
Built-In Defroster Yes

LAN NETWORKING INTERFACES

Protocol/Data Rate 802.3z Ethernet, 1.25 Gbps (GigE/GbE)

Physical LAN Network Interface Standard SFP interface for 1000Base-SX/LX (fiber), or 1000 RJ-45 (copper)

VLAN Ethernet Support Up to 1000 Mbps, full-duplex, VLAN/802.1Q pass-through support

Physical Mgt. Interface Inband via Ethernet connection or outband via separate 10/100 RJ-45 copper port Management System Integrated Ethernet based Web Browser GUI, SNMP v1/2c (optional v3), RMON,

Alarm Reporting via SNMP traps, On-board History Traffic Counter Log, TELNET

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)



