



The all new 2012 AireBeam™ Series

State of the Art
70/80 GHz 4G/LTE backhaul for
Enterprise & Carriers

Multi-mile Gigabit Ethernet at
up to 99.999% availability

High quality:
German hardware engineering
combined with U.S. manufacturing
efficiency & software
design excellence

4G/LTE

An aerial photograph of New York City, showing a dense urban landscape with numerous skyscrapers and Central Park. A prominent red line starts from the top right corner and points towards a specific building in the mid-ground, likely representing a backhaul connection.

The 2012 AireBeam™ Series: Next generation backhaul

Whether you are connecting two buildings or a complete city, LightPointe's new 70/80 GHz backhaul solutions are ideal for carrier grade Gigabit Ethernet transmission. The AireBeam Series was designed from the ground up to support today's bandwidth intensive networks for businesses and mobile networks facing exponential demand due to the growth of smart phones, tablets and video streaming.

A long track record... from the pioneer in wireless solutions

LightPointe is the pioneer in outdoor wireless solutions. While competitors have come and gone, and others continue to raise venture funding, we have successfully navigated through the storms of the dot-com and telecom cycles and have emerged stronger, smarter and even more committed to our customers and developing state-of-the-art products. With over \$80 million in product development and over eight key patents, LightPointe has deployed over 14,000 outdoor wireless connectivity solutions worldwide since 1998. Today, all products are manufactured in San Diego, California, USA, where our senior engineers and scientists monitor every facet of production and testing.

New features & performance enhancements

- Choice of RJ45 copper, MM, or SM fiber connectors for each side of link
- Certified by an independent Notified Body for worldwide deployments
- Ultra high gain 1^{FT}/.3m & 2^{FT}/.6m field-changeable antennas
- Power-over-Ethernet for easy installation (PoE)
- Industry exclusive link optimizer/indicators
- Industry's lowest energy consumption
- Easy-mount polarization adjustment
- Lightweight all-weather enclosure
- Carrier grade SNMPv.2
- High system gain
- Low latency

AireBeam G80-MX
Medium Range
(1^{FT}/.3m)



AireBeam G80-LX
Long Range
(2^{FT}/.6m)



Carrier class features to keep your network reliable and fast...

- Full duplex Gigabit Ethernet throughput.
- Low system latency, and no packet delay due to excessive packet buffering.
- Industry exclusive rear panel display for faster, more precise installation (RSSI receive signal bar graph LED, network status, various system status LEDs).
- Flexible SFP based optical fiber interface, support for standard multi mode or single mode GigE/GbE SFPs, and alternative 100/1000 RJ45 copper interface.
- Up to 99.999% availability.
- Ethernet based upgrade of System Firmware and Web Browser Management GUI.
- Power over Ethernet (PoE) and/or alternative low power direct 48Vdc connection eliminates the need for expensive high voltage power cabling and/or a electrician.
- Industry leading low power consumption (less than 20W).
- Highest level of physical transmission security due to narrow transmission beam.
- MMW radio module, antenna and network interface board are fully integrated (no need for separate indoor unit and cumbersome RF coax cable).
- All IP67 rated outdoor connectors for data, management, power, etc.
- External add/drop networking port or DualPath™ 1+1 hot standby.
- Ethernet based RJ45 management connection, Web browser management GUI, fully integrated SNMP v1/2c (optional v3) management support.
- Alarm Reporting via SNMP traps, RMON counters, TELNET and separate RS232 terminal connection.

Competitive advantages

- Low latency: 25% less than our nearest competitor's flagship model
- Low power consumption: 55% less
- Faster ROI
- More connector options
- GigE all the time
- On-board multi-function display for faster & easier installation & monitoring
- Manufactured in USA at LightPointe's new factory/headquarters
- High system gain



Applications

Carriers/Mobile 4G/LTE Backhaul
 Service Provider Backbone
 Enterprise Building Connectivity
 School/University Campus Links
 Hospitals/Medical Data Links
 Federal/State/Municipality Links
 Military Base/Theater
 Security/Video Backhaul

Product Specification

Description

Frequency of Operation
 Transmission Power
 Dimensions w/o Antenna
 Antenna Size
 Antenna Gain
 Antenna Polarization
 Polarization adjustment
 Antenna HPBW
 Unit Weight
 Operating Voltage
 Operating Temperature
 Humidity Range
 Environmental/IP Rating
 Power Consumption
 Mounting Options
 Status-LEDs
 Alignment tools
 Range

AireBeam™ G80-MX (medium range)

Outdoor MMW Radio transceiver with integrated high gain antenna including mounting/alignment assembly and power supply
 74.875/84.875 GHz (FDD), digitally modulated
 100 mW (+20dBm)
 (57L x 33W x 36H) cm
 30 cm 60 cm
 45 dBi
 Horizontal/Vertical
 Field adjustable via ODU rotation
 0.7°
 8.2 kg
 110/230 ac; direct 48 Vdc (fully outdoor rated) or Power over Ethernet (PoE)
 -35°C to +60°C (-31°F to 140°F)
 Up to 95% (Non-Condensing)
 IP66
 20W max
 Pole mount alignment bracket w/coarse & fine-alignment (60-110 mm pole diameters)
 Power, TX Data, LOS, Overload, Data In, Data Out
 Antenna mounted Site Alignment spotting tool, RSSI LED bar graph
 Up to 7 miles/11.5 km or more, depending upon rain zone and availability required

AireBeam G80-LX (long range)

(70 x 51 x 66) cm

51 dBi

0.5°

11.1 kg

Networking

Protocol
 OSI Layer
 Latency
 Ethernet Interfaces
 Data Rate
 Physical Connections
 Management Interface
 Management Access
 Alarm Reporting

802.3z (Gigabit Ethernet)
 Physical layer 2
 < 40 microseconds
 100/1000Base-TX on the primary data port; 1000Base-SX/LX and 1000Base-TX on the SFP interface
 Gigabit Ethernet, Full Duplex
 Fully outdoor rated IP67 network connection (No need to open radio enclosure)
 User selectable in-band management (VLAN support) or via separate out-of-band Ethernet connection
 Integrated Ethernet based Web Browser GUI, SNMP v1/2c (optional v3), RMON, Via SNMP traps, TELNET and separate RS232 terminal connection

REGULATORY

United States: FCC 47 CFR Part 15 Class B, FCC CFR 47 Part 101; IC ICES-003 Class A
 International: CE MARK
 EN 302 217-3 v1.3.1 (2009-7); EN 302 217-2-2 v1.4.1(2010-07);
 EN 302 217-4-2 (2010-01); EN 301 489-04 V1.4.1 (2009-05); EN 61000-3; EN 61000-4
 EN 60950-1:2006 + A1:2010

Flexible Gigabit Ethernet Options

...whether you are connecting two buildings or an entire city

The best point-to-point wireless options & features in the industry, since 1998

- Innovative 70/80 GHz Backhaul Radios
- Hybrid Optical-Radio Bridges, for the best of both technologies
- Next generation Free Space Optics, from the #1 manufacturer of FSO
- Universal Control System (easy management of any/all LightPointe platforms)
- The only manufacturer with the breadth of products and expertise to enable mixing and matching today's cutting edge technologies to optimize your network performance, security and ROI
- High quality: German hardware engineering combined with U.S. manufacturing efficiency and software design excellence

Broadband at the speed of light

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