



# 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 the dense urban landscape of Manhattan and the surrounding water. A prominent red line graphic starts from the top right corner and extends diagonally across the city towards the left, ending near the text. The line appears to be a stylized representation of a signal or data path.

# 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.

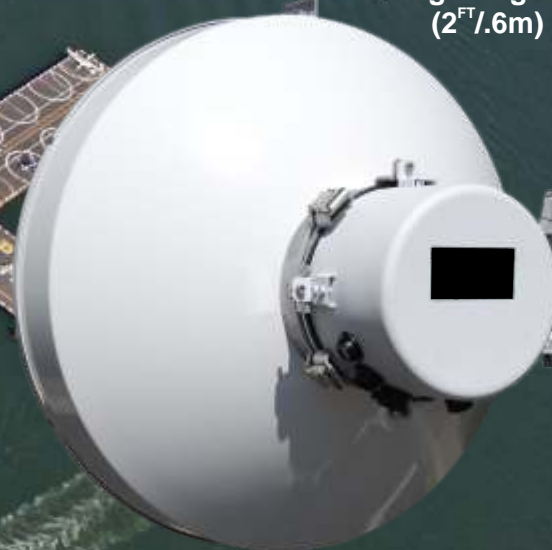
## New features & performance enhancements

- 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<sup>FT</sup>/.3m & 2<sup>FT</sup>/.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<sup>FT</sup>/.3m)



AireBeam G80-LX  
Long Range  
(2<sup>FT</sup>/.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: 802.3z (Gigabit Ethernet)  
 OSI Layer: Physical layer 2  
 Latency: < 40 microseconds  
 Ethernet Interfaces: 100/1000Base-TX on the primary data port; 1000Base-SX/LX and 1000Base-TX on the SFP interface  
 Data Rate: Gigabit Ethernet, Full Duplex  
 Physical Connections: Fully outdoor rated IP67 network connection (No need to open radio enclosure)  
 Management Interface: User selectable in-band management (VLAN support) or via separate out-of-band Ethernet connection  
 Management Access: Integrated Ethernet based Web Browser GUI, SNMP v1/2c (optional v3), RMON,  
 Alarm Reporting: 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



**LIGHTPOINTE™**  
WIRELESS

Broadband at the speed of light

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