70/80GHz Point-to-Point Enterprise & Carrier Backhaul Solution

LightPointe's new AireBeam™ Series is ideal for multi-mile long distance Gigabit Ethernet transmission, and are now designed and manufactured at our headquarters in San Diego, California. These state-of-the-art backhaul solutions can be utilized in advanced networks, or simple point-to-point connectivity between buildings or towers. With latency 25% lower than our nearest competitor's flagship model and 55% less power consumption, the AireBeam Series is available in long distance (G80-LX) and medium distance (G80-MX) configurations.

Whether you are connecting two office buildings, school campuses or apartment complexes across town—or building a Metropolitan Area Network backhaul ring around an entire city—LightPointe's advanced millimeter wave solutions are built for easy installation (PoE) and modular simplicity for maximum reliability and performance.

Enterprise & Carrier Applications

- Fiber-like long distance building connectivity for schools, businesses, government buildings and hospitals—without trenching/installing fiber or the recurring costs of leased-line alternatives.
- 4G/LTE mobile backhaul.
- Disaster recovery/emergency communications restoration.
- Digital video and video surveillance connectivity.
- Remote storage access.
- Mesh and Multipoint infrastructure.
- Local Area Network extension.
- Military theater of operations and base connectivity.
- Homeland security.

Advanced Next Generation Radio Features

- High speed full-duplex 1.25 Gbps/Gigabit connectivity.
- Choice of RJ45 copper, MM or SM fiber connectors for each side of link.
- Ultra high gain 1ft/.3m & 2ft/.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 and low latency.
- Certified by an independent Notified Body for worldwide deployments.

Product Specification	AireBeam™ G80-MX (medium range)	AireBeam G80-LX (long range)
Description	Outdoor MMW Radio transceiver with integrated high gain antenna including mounting/alignment assembly and power supply	
Frequency of Operation	74.875/84.875 GHz (FDD), digitally modulated	
Transmission Power	100 mW (+20dBm)	
Dimensions w/o Antenna	(57L x 33W x 36H) cm	(70 x 51 x 66) cm
Antenna Size	30 cm 60 cm	
Antenna Gain	45 dBi	51 dBi
Antenna Polarization	Horizontal/Vertical	
Polarization adjustment	Field adjustable via ODU rotation	
Antenna HPBW	0.7°	0.5°
Unit Weight	8.2 kg	11.1 kg
Operating Voltage	110/230 ac; direct 48 Vdc (fully outdoor rated) or Power over Ethernet (PoE)	
Operating Temperature	-35°C to +60°C (-31°F to 140°F)	
Humidity Range	Up to 95% (Non-Condensing)	
Environmental/IP Rating	IP66	
Power Consumption	20W max	
Mounting Options	Pole mount alignment bracket w/coarse & fine-alignment (60-110 mm pole diameters)	
Status-LEDs	Power, TX Data, LOS, Overload, Data In, Data Out	
Alignment tools	Antenna mounted Site Alignment spotting tool, RSSI LED bar graph	
Range	Up to 7 miles/11.5 km or more, depending upon rain zone and availability required	

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

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