

AIREBEAM™ G70 SERIES

OVERVIEW

The AireBeamG70 product line represents the latest innovation in millimeter wave (MMW) point-to-point outdoor wireless network connectivity. Available with two different size high-gain antennas the AireBeamG70 system provides highest availability for shorter and medium/longer distance applications. Under typical North American and European climate and rain conditions availability figures of 99.9% and higher can be achieved over distances exceeding several kilometers at full duplex Gigabit Ethernet (GbE) speed.

The AirebeamG70 series is targeted at Enterprise LAN customers and Service Providers seeking a cost-effective, easy-to-install, high-performance alternative to leased lines when connecting buildings, campuses or other remote locations. Other target applications include, but are not limited to, "Last Mile" metropolitan area network (MAN) access, mobile wireless backhaul, and security/video surveillance.

Operating at full duplex GbE speed and at optical fiber-like system latency, the AirebeamG70 series is ideal for bandwidth-intensive, realtime, and mission critical applications such as Voice-over-IP, medical imaging, CAD/graphic design and video.

FEATURES AND BENEFITS

- High Speed Connection** - Full duplex Gigabit Ethernet throughput.
- Ultra Low Latency** - Fiber-like system latency and no packet delay due to excessive packet buffering.
- Network Interfaces** - Flexible and user configurable SFP based optical fiber interface, support for standard multimode or singlemode GbE SFPs, and alternative 10/100/1000 RJ45 copper interface.
- High Availability** - Predictable availability with up to 99.999% network uptime.
- Upgradable Software** - Ethernet based upgrade of System Firmware and Web Browser Management GUI.
- Low Voltage Design** - Power over Ethernet (PoE) and/or alternative low power direct 48Vdc connection eliminates the need for expensive high voltage power cabling and/or an electrician.
- Low Power Consumption** - With a total power consumption of less than 20W system uses less energy than a standard fluorescent light bulb.
- Secure Operation** - Highest level of physical transmission security due to narrow transmission beam pattern.
- Mounting Flexibility** - Flexible installation with Pedestal Style mounting with LightPointe Pan and Tilt or Side Mount style with LightPointe pole mounting assembly.
- All Outdoor Design** - MMW Radio module, antenna, and network interface board are fully integrated - no need for separate indoor unit and cumbersome coax RF cable connections.
- Installation/Alignment** - RSSI receive signal bargraph LED, network status indicators and various system status LEDs.
- Network Management** - 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.



Data Sheet

PRODUCT SPECIFICATION

AIREBEAM™G70-MX

AIREBEAM™G70-LX

| | | |
|------------------------------------|---|--------|
| Description | Outdoor MMW Radio transceiver with integrated high gain antenna incl. mounting/alignment assembly and power supply | |
| Frequency of Operation | 71.125...75.875 GHz | |
| Transmission Power | 50 mW (+ 17dBm) | |
| Modulation | ASK | |
| Dimensions w/o Antenna (W x L x H) | 280 x 180 x 100 mm | |
| Antenna Size | 25 cm | 48 cm |
| Antenna Gain | 43 dBi | 48 dBi |
| Antenna Polarization | Horizontal/Vertical | |
| Antenna HPBW | 1.2° | 0.7° |
| Unit Weight | 6 kg | 8 kg |
| Operating Voltage | Power over Ethernet (PoE) or 48 Vdc | |
| Operating Temperature | -30°C to 70°C -22°F to 158°F | |
| Humidity Range | Up to 95% (Non-Condensing) | |
| Environmental/IP Rating | IP66 | |
| Power Consumption | max. 20W | |
| Mounting Options | Pole mount alignment assembly or pan-tilt alignment assembly | |
| Mounting Pole Diameters | 60...110 mm (Pole mount alignment assembly); 70 mm (Pan-tilt alignment assembly) | |

NETWORKING

| | |
|----------------------------|--|
| Protocol | 802.3z (Gigabit Ethernet) |
| OSI Layer | Physical layer 2 (Layer 1 optional) |
| Physical Network Interface | Standard fiber SFP (1000Base-SX/LX) and 10/100/1000 RJ-45 copper |
| Data Rate | Gigabit Ethernet, Full Duplex |
| Management | Integrated Ethernet based Web Browser GUI, SNMP v1/2c (optional v3), RMON, Alarm Reporting via SNMP traps, TELNET and separate RS232 terminal connection |

REGULATORY COMPLIANCE

| | |
|----------------|-----------------------------------|
| United States: | FCC Part 101 (FCC ID USPAB701000) |
| Europe: | CE MARK (CE1313!) |
| | TS 102 524 V1.1.1 (2006-07) |
| | EN 301 389-04 V1.3.1 (2002-08) |
| | EN 60950-1:2001 + A11:2004 |
| | UK IR 2000 |

OTHERS

Operational Range Dependent on rain zone of operation and availability requirement

Transmission Distances in Rainzones E, K, H, F @99.9% Availability

