



APPLICATION BRIEF



VOIP SOLUTIONS

Enterprise Wireless Voice and Data Networks: Inter-building VoIP with Optical Wireless Connectivity

THE PROBLEM:

With the rising tide of voice, data, fax, and multimedia traffic flowing over Enterprise networks, many businesses that link multiple buildings in a unified LAN face several challenges. The rapid adoption of Voice-over-IP (VoIP) telephony and other converging voice and data network solutions is pushing the limits of thin 1.54-megabit wired T1 and E1 inter-building LAN connections. The resulting poor voice quality, jitter and latency are unacceptable tradeoffs to reap the efficiency and costs benefits of Internet telephony.

The Problem: T1 and E1 inter-building connections limit the value of efficient and high-performance converged voice and data applications, such as VoIP.

Traditionally, the only option for building-to-building ultra high-speed connectivity has been dedicated or leased fiber-optic cable. VoIP's primary value of eliminating the Telco

middleman and recurring monthly lease charges disappears when IT professionals in business campus environments see the proposed enormous costs of inter-building fiber-optic cable connections. Acquiring permits, securing rights-of-way, trenching, laying fiber-optic cable and meeting environmental regulations are among the challenges that make the option too expensive to justify. Leasing fiber is another costly alternative that is not always available at all needed locales. To eliminate the large expenses of fiber, existing connectivity throughput constraints, reliance on Telcos and deployments of wired infrastructure that can take months, businesses are adopting Optical Wireless solutions.

THE SOLUTION:

Businesses with offices visible by line-of-sight are turning to high-speed Optical Wireless bridging solutions for high-throughput voice and data applications. Leveraging free-space optics (FSO) technology, Optical Wireless solutions combine the speed of fiber with the flexibility of wireless. Using beams of light, businesses can transmit simultaneous voice and data packets between facilities without a Telco intermediary.

The solution eliminates:

- Costly fiber investments
- T1 and E1 throughput constraints
- Time-consuming permitting and installations
- Reliance on fixed-line service providers
- In-ground fiber requirements

The Solution: High-throughput beams of light connect buildings, improving voice quality and eliminating fixed-line service provider contracts and financial commitments.

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VOIP SOLUTIONS

LIGHTPOINTE LEADERSHIP:

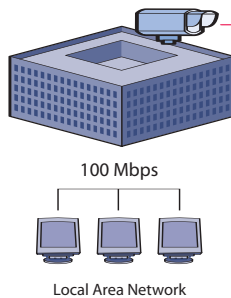
LightPointe Optical Wireless solutions are deployed in 60 nations.

LightPointe is a pioneer in Optical Wireless solutions. Whether businesses are implementing forklift VoIP upgrades or seeking to interface a LAN with existing PBXs, LightPointe provides proven wireless solutions. The company's outdoor wireless products have enabled building-to-building wireless VoIP for many of the world's largest businesses. Designed to meet the bandwidth and availability requirements of the enterprise, LightPointe seamlessly connects buildings that have line-of-sight visibility within approximately 4,000 meters (2.5 miles).

Additional Benefits include:

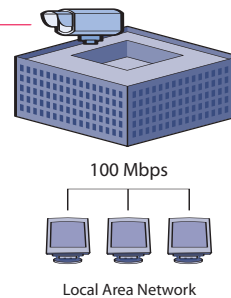
- Full speed, bi-directional communication
- No ongoing charges – simply purchase and install
- Not reliant on service provider fiber line availability
- Secure connections cannot be sniffed or detected
- Installed and operational in a day
- Immune from interference with existing wireless products
- Can be mounted on roofs or behind windows
- No spectrum licenses
- Works in climates around the world from Siberia to Baghdad
- Multi-beam redundancy available

CORPORATE HEADQUARTERS



Optical Wireless

RESEARCH AND DEVELOPMENT



LightPointe enables converged voice and data connectivity among multiple buildings via beams of light.