SKYFIBER™

PRODUCT OVERVIEW

By 2014, there will be over 40,000 petabytes of mobile traffic moving across the global telecommunications network annually. Today's economic dependence on global network connectivity has resulted in unprecedented demands for greater capacity, faster speeds and higher quality broadband coverage to support the proliferation of voice, data, and video content in both wired and mobile enterprises.

As of 2009, over 75% of all U.S. commercial buildings still do not have fiber access.

Both Carriers and Enterprises need a cost effective way to keep up with the explosion in broadband demand. With 14 years of industry experience, SKYFIBER leverages over a decade of product innovation to deliver patented Optical Wireless Broadband (OWB) mesh networks that allow customers to rapidly expand the capacity of their networks. SKYFIBER's SkyLINK, SkyCAST and SkyMESH solutions offer high capacity broadband at low cost, at as little as one-tenth the cost of in-ground fiber. Deployment takes less than a day because OWB is free of the licenses, permits, and right-of-way constraints of other solutions. Coupled with the industry's first On-Demand licensing model, SKYFIBER offers a high-performance solution that removes the cost of entry and time-to-market barriers inherent in other broadband solutions.
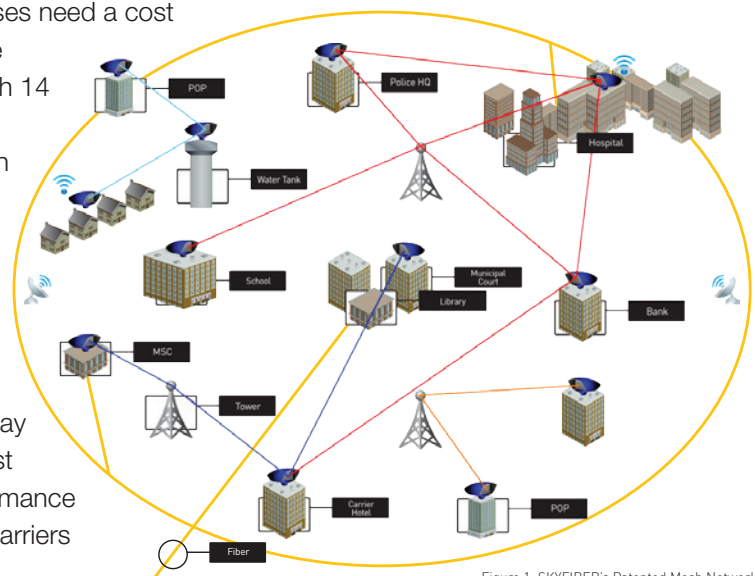

Figure 1: SKYFIBER's Patented Mesh Network

Applications for the SKYFIBER Solution

- Wireless Backhaul and Overlay Networks
- Fiber Extension and Last Mile Access
- Healthcare and Campus Solutions
- Municipalities and Local Government
- Security and Surveillance Networks
- Emergency Response Networks
- Homeland Security and Federal Government

SKYFIBER's Unique Solution Delivers

- High Bandwidth
- Low Cost
- Rapid Deployment
- Reliability and Security
- Patented Architecture
- Green Technology

Outdoor Lens Unit (OLU)	
Description	Fixed Optics System
Dimensions	20.6cm(8") x 34cm(13.4") x 12.7cm(5")
Unit Weight	5.1 kg (11.4 lbs)
Operating Temperature	-40° to +65° C (-40° to 149° F)
Humidity Range	Up to 95% non-condensing
Immune to EMI & RF Interference	Yes
Built-In Active Alignment	Yes
Built-In Lens Heater & Anti-Fog Coating	Yes
Optical Wireless Link	
Link Data Rate	125Mbps, 1.25Gbps
Available Link Budget	48dB
Operational Range	250m to 1,600m (1.1mrad system)
Optical Wireless Wavelength	860 nm
Forward Error Correction	Yes
Inter-connect Cables (ICC)	
Description	Connects CST and OLU
Fiber	Multi-mode Fiber
Control	Cat5
Regulatory	
Compliance	FCC, RoHS
Laser Safety	Class 1M (1.1mrad system)
Communications Service Terminal (CST)	
Dimensions	21.8cm (8.6") x 23cm (9") x 4.5cm (1.8")
Unit Weight	3.5 kb (1.6lbs)
Operating Temperature	0° to +45° C (32° to 113° F)
Humidity Range	Up to 95% non-condensing
Power Input	-42 to -60Vdc Dual feed (A / B)
Power Consumption	15W
Client Interfaces	Up to 4 10/100/1000 Ethernet Ports
Client Interfaces	
External Interfaces	3 Copper (GE/FE RJ45)
	1 Fiber GE/FE (SFP or RJ45)
Aggregation support	Yes
Per port rate limiting	Yes
Flow control	Yes
VLAN Transparent	Yes
VLAN Tagging / Switching	Yes
QoS support	Yes
Communications Service Terminal (CST)	**Operations**
User Interfaces	SNMP v2, Web (HTML), CLI
Local Access	FE port or RS-232 (CLI only)
Remote Access	In-Band or Out-of-Band
SW Upgrade Capability	Remote & Non-service affecting
Reset Flexibility	Push button and Remote
Terminal Status LED's	Power, Alarm, Tx, Rx, Client
Performance Monitoring	Yes
VLAN Tagging / Switching	Yes

Product Portfolio Overview

SKYFIBER's Optical Wireless Broadband, or OWB, is a technology that uses infrared light to transmit highly secure wireless data, utilizing air as the transmission medium. SKYFIBER's portfolio is comprised of four main products:

SkyLINK

SKYFIBER's flagship product delivers a secure, reliable point-to-point Optical Wireless Broadband link, providing 1 Gbps of bandwidth over distances of up to 1.6 km per link. Using our patented mesh network deployment, SkyLINKs can also be combined to cover larger areas.

SkyLINK-PLUS

For installations that experience extreme weather conditions such as frequent heavy fog, SKYFIBER also offers SkyLINK-Plus, a standard SkyLINK paired with an 802.11n radio backup link. In severe weather, the primary OWB link automatically switches to the 802.11n backup radio; ensuring connectivity is maintained. The SkyLINK-Plus product delivers 1 Gbps of bandwidth during normal operations, and up to100 Mbps during severe weather conditions.

SkyCAST

SKYFIBER provides customers with multiple ways to maximize the value of their bandwidth, by providing Broadband Delivery Solutions. With SkyCAST, customers can deliver customized amounts of bandwidth to multiple users.

SkyMESH

For unique coverage needs, SKYFIBER can develop a customized mesh network solution that provides the customer with an optimized coverage profile. SKYFIBER holds exclusive patents on Optical Wireless Broadband Point to Multi-Point (PtMP) architecture, making us the only OWB mesh solutions provider in the industry. SkyMESH is also excellent for providing a fast, low-cost way to expand bandwidth on existing networks through network turbo-charging, in which the SkyMESH consists of an overlay of SkyLINKs blended with the legacy network.

Contact Us

For further information on SKYFIBER™ products and solutions, please contact sales@skyfiber.com

Or visit us on the web at www.skyfiber.com.