



BEAM Laser Transceiver

The Whirlwind E BEAM incorporates the latest laser technology resulting in the first truly affordable solution for reliable Ethernet, CobraNet[®] and EtherSound[®] wireless transmission.

Read below and discover how this product can simplify digital transmission of video, audio, data and control.



E BEAM system consists of passive laser antenna (on left) and media converter (on right)

WHAT IS THE E BEAM?

The Whirlwind E BEAM is a system for transporting Ethernet, CobraNet[™] and EtherSound[™] data, either point-to-point or cascaded, over a modulated Class One IR laser beam. It represents the latest breakthrough technology in wireless digital laser transmission.

BOLDLY GO WHERE NO CABLE HAS GONE BEFORE "You Can Get There From Here."

The E BEAM can solve many of the logistical problems encountered when using standard copper wire or fiber optic cabling. It's a great solution for "on the spot" setup where there's breaking news, at music festivals, over highways, building to building, anywhere a laser beam can travel and cable or fiber optics cannot. You can route the beam vertically up building cores or horizontally below a ceiling. Link up offices, campuses, stages and sporting events without trenching cable or installing conduit.

E BEAM KEY FEATURES

Versatility

The E BEAM transmits Ethernet compatible protocols. These protocols have rapidly emerged as the standards for digital audio, digital video and control transmissions such as CobraNet, EtherSound, MPEG, AMX, DMX, RS232, etc.

Quick and Easy Setup

E BEAM units can be setup quickly - you're up and running in minutes. Easily set up and aimed with removeable riflescope over distances up to 900 ft. - just point and shoot.



The laser "antenna" contains no electronics - the circuits and laser are contained in the separate media converter than can be located up to 300 ft. away.

For outdoor applications, this means that the electronics can be housed indoors in a stable and protected environment. Heating elements in the antenna are powered by a copper wire embedded in the proprietary fiber optic cable to keep the lenses free from condensation.

Bandwidth

The 100Mb full duplex bandwidth has the capacity for transmitting and receiving large amounts of data or 128 of channels of CobraNet or EtherSound audio in real time. Following soon will be a 1Gb version which will increase bandwidth ten-fold. Switching between 100Mbs and 1Gbs only requires changing the media converter, the antenna supports both versions.

Reliable

The E BEAM utilizes Free Air Photonics over a Class One Infrared Laser. It is unaffected by the effects of rain, fog, heat or visible light. It is also immune to interference from radio sources, radiated noise from nearby electronics, ground loops, etc. Redundant signal paths can easily be established for ensuring fail-safe communications in critical applications.

Secure

Unlike traditional RF based wireless systems, laser transmission travels in a narrow beam (diffuses to a uniform 1 meter diameter at 500 feet). Your data cannot be compromised or listened to without direct interception of the laser beam.

Photonic Networking

Multiple units can be cascaded and branched into a working LAN. Beams can be pointed, transmitted, received and redirected at any angle without use of mirrors. The resulting bi-directional network allows signal transmission with add/drop points at any location.

Cost Effective

Although the E BEAM is not intended to totally replace structured cable, its implementation into a hybrid Ethernet / fiber delivery system can greatly reduce costs associated with construction labor, conduit, termination and other issues encountered with hardwired systems.

Share computer network resources (data, VOIP, Internet) throughout an office complex or building-to-building on campus when obstacles prevent hardwired solutions.

WHIRLWIND

When it has the Whirlwind name on it, you know it's backed by a company with a reputation for commitment to quality. Please feel free to contact us with your questions and comments.