

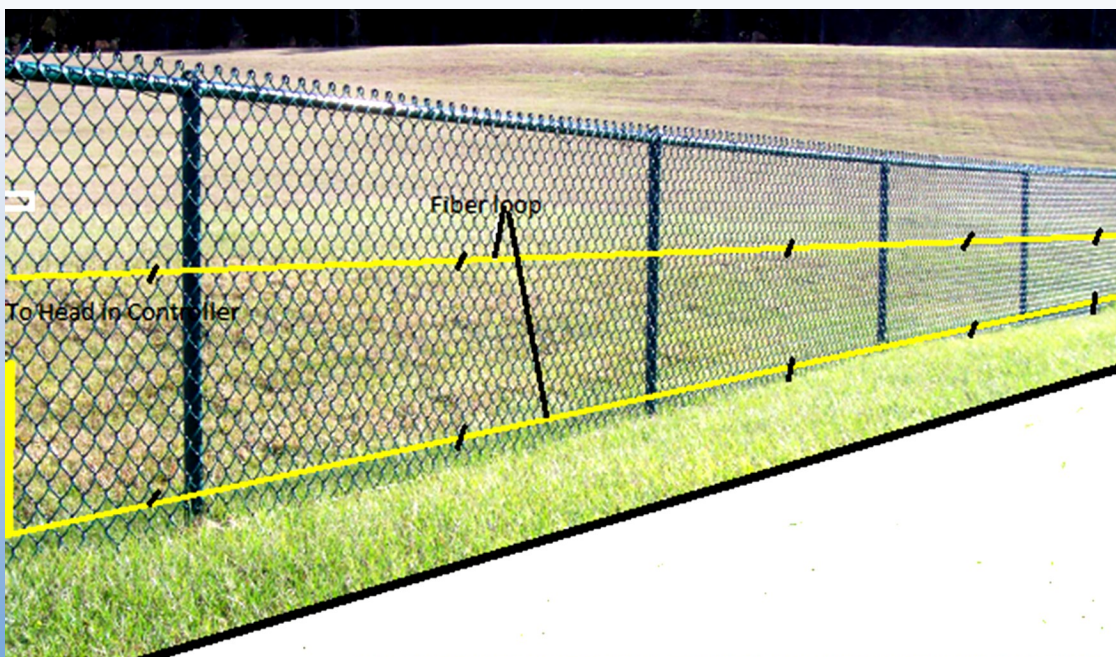
# RLTD FIBER SENSOR



BEI Security's new long range sensor loop utilizes a newly developed patent pending technology called Reflected Light Time Differential (RLTD). RLTD offers a unique and easily deployed intrusion detection system utilizing a single mode fiber optic cable and a single head end controller. The system is capable of protecting perimeters up to 50 kilometers in length (100 km of fiber). The system offers major cost reduction over comparable OTDR or Fiber Braggging installations.

The BEI RLTD terminates both ends of the fiber into the control sensor electronics at the head end. By doing so, we now have two complete paths to examine signals. This eliminates the pulsing or bounce problem experienced in the reflected signals on OTDR. Since we are looking at two signal paths, it will eliminate false echoes and allow the system to make very precise time differential measurements as to the location of the disturbances. By increasing the sampling frequency we can further zero in on the exact disturbance location. *Since the BEI approach utilizes a single cable the fiber cost is a fraction of that versus Fiber Braggging. Compared to the OTDR approach, the BEI electronics cost are one-tenth the cost of an OTDR installation.*

The RLTD single mode fiber optic cable is attached to an existing fence and looped back to the head end in the following manner.

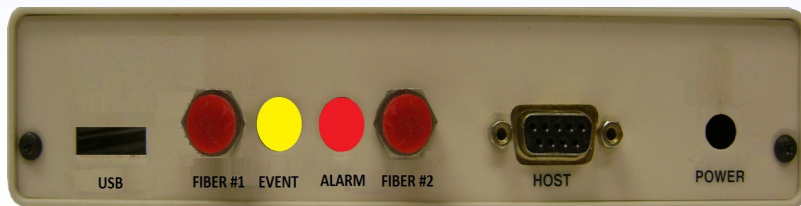


The head end receives the laser signals and reacts to the variations in the infrared lasers return signal. The head end controller is connected to a PC via a USB or RS232 connection to receive and process the signal to determine if an intrusion event has taken place. The software that interfaces to the controller provides a graphical representation of the perimeter and denotes the location of the incursion.

## RLTD FIBER SENSOR Operational Characteristics:

- Derived from BEI's unique Fiber Sensor technology, the RLTD system extends the zone length from 100 meters up to 50 kilometers. It is easy to install and maintain.
- The RLTD fiber sensor controller is housed in a small enclosure powered by either low voltage AC or DC.
- The RLTD fiber sensor interfaces via either RS232 or USB to a PC for signal processing and alarm notification.

With the RLTD fiber sensor unit there is no power required in the field.



## Contact Us

Give us a call for more information about our services and products

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## RLTD FIBER SENSOR Specifications:

- ◆ Electrical – 12 to 24 VDC or 9 to 18 VAC @ 1 amp into a 2.1mm receptacle
- ◆ 9/125um Single mode fiber with ST fiber optic connectors
- ◆ Mechanical dimensions: LWH 8" x 6" x 1.5"
- ◆ Environmental: Temperature -3 to 55 degrees Centigrade
- ◆ Humidity 10-90% non-condensing
- ◆ Maximum loop distance is 100 kilometers