

REAL-TIME CONTINUOUS TEMPERATURE MONITORING

The Distributed Temperature Sensing (DTS) System uses a communications grade fiber optic cable as a continuous linear sensor with a low power laser source to provide real time, multi-point temperature monitoring. The ability to continuously monitor temperature over an extended distance can:



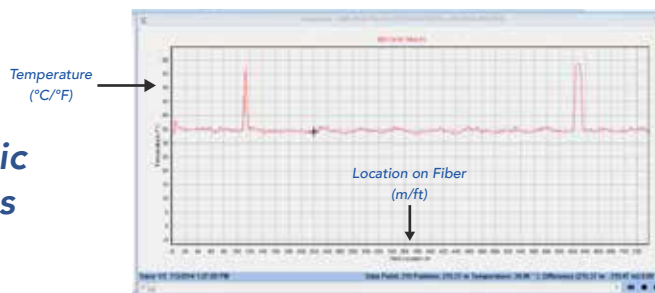
Temperature Sensing Unit
**Courtesy of LIOS Technology*

- Predict equipment malfunctions before catastrophic failures occur,
- Anticipate conditions leading to a fire before combustion takes place,
- Monitor large food refrigeration units to prevent spoilage,
- Identify the exact location of leakage from pipelines and gas containment vessels, and
- Locate damage in power cables.
- Detect loose connections in electrical panels.

The system is inherently safe for use in hazardous environments.

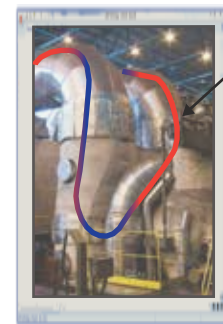
Alerts Location of Temperature Variations

Multiple graphic display options available.



** Graphic Courtesy of LIOS Technology*

Temperature Profile Display



Temperature Gradient Representation

Graphic Temperature Gradient Display (example)

The DTS System can connect to either a PC or to I/O equipment to alarm for conditions such as over/under temperature, hot/cold spots, and rate of rise/drop. All alarm thresholds are programmable for each individual point or section being monitored. The RSL DTS can also interface with existing monitoring systems through standard protocols.

Features

- Temperature measurement locations, measurement intervals, and alarms can be configured for multiple applications on the same DTS channel and reprogrammed as required.
- Measurement accuracy is possible to 0.5°C (1°F) with 0.5 meters (1.5 ft) resolution.
- Temperature can be continuously monitored along a sensor cable up to 40 Km long (depending on fiber type and system configuration).
- System can be programmed to monitor multiple zones in large spaces.
- Can be configured for multiple applications including refrigeration temperature monitoring, gas/fluid leakage, detection of machinery wear and malfunction, fire prevention, real-time power rating, and detection of loose electrical panel connections.

Rugged and Durable Lighting and Safety Products

RSL Fiber Systems is the leader in advanced fiber optic lighting, illumination and safety systems for military and commercial applications. In close collaboration with customers, RSL has earned the reputation for developing and effectively implementing new products that provide practical, cost saving, safety-enhancing solutions.

Our Commercial Products Include:

- Inherently safe fiber optic methane detection and temperature monitoring systems
- Machinery and Personnel Active Visibility Systems
- Lighting for explosive areas

Innovative solutions for the most complex, demanding illumination and safety applications.....

... That's RSL Fiber Systems

RSL

*Fiber Systems, LLC
"Advanced Lighting Technologies"*

Sue D'Amico
(860) 282-4930 ext. 4946
sddamico@rslfibersystems.com

Giovanni Tomasi
(860) 282-4930 ext. 4929
gptomasi@rslfibersystems.com

