VIAVI Solutions

Brochure

# VIAVI Distributed Temperature and Strain Sensing (DTSS)

# Distributed Fiber Optic Sensing solution for measuring Temperature and Strain using single ended Brillouin OTDR

With over 40 years of experience in fiber optic test equipment for field measurements and monitoring systems, VIAVI migrates its knowledge and technology to Distributed Fiber Sensing Applications.

The VIAVI Distributed Temperature and Strain Sensing (DTSS) solution is based on Brillouin scattering technology. Measure the temperature and strain along a fiber optic cable. It can be configured in a portable platform for cable commissioning and routine auditing or in rackable platform for permanent monitoring through the most widely deployed remote fiber test system, the ONMSi.



#### OneAdvisor 1000 DTSS



# **Key Benefits**

- Simultaneous temperature and strain measurement requiring only one fiber (Patented)
- Single-ended solution
- Portable: Compact, modular, lightweight, and battery operated (no power generators needed)
- Rackable: Fully compatible with VIAVI Fiber Monitoring solution (ONMSi)

## **Key Features**

- B-OTDR solution (Brillouin OTDR)
- Temperature and strain monitoring
- Decorrelation of temperature and strain
- Multi-port measurements
- Low power consumption rackable version
- Battery operated portable version
- Connected product (Bluetooth, WiFi, and remote control operation with Smart Access Anywhere (SAA)

# Applications

- Pipeline monitoring
- Telecom cable monitoring
- Power cable monitoring
- Geotechnical/Structural Health Monitoring (SHM)

FTH-DTSS

# Applications

#### **Pipeline monitoring**

- Leak detection
- Ground movement monitoring
- Fatigue detection



#### Telecommunication

- Buried fiber optic cables monitoring
- Aerial cable monitoring
- Optical cable commissioning for strain measurement following IEC-60794–3–20:2016



#### **Power Cable Monitoring**

• Hot spot detection and localization



## Structural Health Monitoring

- Crack detection
- Infrastructure management and design
- Dam, Dike, Tunnel, Bridge monitoring



#### Compatible VIAVI application software expands your capabilities:

- **Post-Processing PC Software for Fiber Sensing Trace:** Post-Processing PC software for fast and efficient viewing, editing, analyzing and printing of the Fiber Sensing data file
- **Remote Access Application:** SmartAccessAnywhere (SAA), App enables Workforce support in real time; Remote control of VIAVI Interrogator; data files, reports transfer, or firmware upgrades
- **Optical Network Monitoring System (ONMSi):** The ONMSi platform enables permanent, proactive monitoring of the fiber integrity, as well as temperature for a complete analysis of the fiber health

# **VIAVI Care Support Plans**

#### Increase your productivity for up to 5 years with optional VIAVI Care Support Plans:

- Maximize your time with on-demand training, priority technical application support and rapid service.
- Maintain your equipment for peak performance at a low, predictable cost.

Plan availability depends on product and region. Not all plans are available for each product or in every region. To find out which VIAVI Care Support Plan options are available for this product in your region, contact your local representative or visit: <u>viavisolutions.com/viavicareplan</u>

#### Features

\*5-year plans only

Plan	Objective	Technical Assistance	Factory Repair	Priority Service	Self-paced Training	5 Year Battery and Bag Coverage	Factory Calibration	Accessory Coverage	Express Loaner
BronzeCare	Technician Efficiency	Premium	$\checkmark$	$\checkmark$	$\checkmark$				
SilverCare	Maintenance & Measurement Accuracy	Premium	$\checkmark$	$\checkmark$	$\checkmark$	√*	$\checkmark$		
<b>MaxCare</b>	High Availability	Premium	$\checkmark$	$\checkmark$	$\checkmark$	√*	$\checkmark$	$\checkmark$	$\checkmark$



Contact Us +1 844 GO VIAVI (+1 844 468 4284)

To reach the VIAVI office nearest you, visit viavisolutions.com/contact

© 2024 VIAVI Solutions Inc. Product specifications and descriptions in this document are subject to change without notice. Patented as described at viavisolutions.com/patents dtss-fibersensing-br-tfs-nse-ae 30194109 900 0524

viavisolutions.com