Spectraleye™ 400 Interrogator Family



Description

The SpectralEye Interrogator is the first handheld interrogation system for Fibre Bragg Grating (FBG) sensors. The product has been developed by FOS&S in co-operation with Axsun Technologies.

This device provides powerful, reliable, easily integrated measurement options, for Fiber Bragg Grating and other optical sensor developers and system integrators. The speed, narrow linewidth and superb repeatability of the integrated Optical Spectrum Analyser (OSA) provide the accuracy and resolution needed for a wide range of optical sensing applications.

With its rugged design, configuration flexibility, small size, standard integrated battery and low cost, Spectraleye Interrogators are designed to meet the diverse needs and challenging requirements of the fiber optic sensing community.

Operational flexibility is another important advantage of the SpectralEye Interrogator family. Application software can be customized to display temperature, strain or any other physical parameter. SpectralEye Interrogators can even be operated in a passive optical spectrum analyzer mode, displaying power versus absolute wavelength and can be directly controlled using a laptop or other PC for on-line monitoring. An optional integrated HP iPAQ™ Pocket PC provides extended communications, control, storage, and display flexibility.

FOS&S

Fiber Optic Sensors and Sensing systems

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Released: May, 2005

Spectraleye™ 400 Interrogator Family

Features

- 35pm Wavelength Accuracy
- 40nm Scan Range
- 500 µW Launch Power
- 1pm Resolution
- Fast Scan time
- 90 Minute Battery Operation
- RS-232 Interface Extended communication
- Wi-Fi Interface
- USB

Applications

- Pipeline Stress Monitoring
- Offshore Oil Platform Riser Stress Monitoring
- Oil well Temperature and Pressure Monitoring
- High-Tension Line Temperature Monitoring
- Geotextile Strain Monitoring
- Security / Defense Fence Monitoring
- Civil Structure Stress and Strain Monitoring
- General purpose Optical Spectrum Analysis

Standard specifications

	SE-400		
Parameter	**Min**	**Max**	**Units**
Wavelength Range	1530	1570	nm
Source Launch Power in SMF	500		µW
Wavelength Accuracy*	±35		pm
Wavelength Resolution	1		pm
Scan Time	1		Sec.
Dynamic range	19		dB
Operating Temperature	10	40	°C
Battery Life	90		Min.
Mechanical Dimensions	200 X 135 X 45 mm 7.9 X 5.5 x 1.8 inches		
Interfaces			
RS-232	DB-9		
USB 2.0	USB-B		
Optical	FC/APC		
Battery Charger	DC-input jack		

** One-Year continuous operation*

Ordering information

Please contact FOS&S

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