



FSI-OC



Oak Creek Fiber Sensing Interrogator

Based on Sedona platform, the Oak Creek Fiber Sensing Interrogator (FSI-OC) is the next generation in high performance fiber sensing. The FSI-OC was developed with an advanced photonics sensing module integrated inside Optilab's Sedona platform. The Sedona platform features lightweight, compact, battery powered, touchscreen and intuitive interface design. Depending upon the sensor connected FSI-OC, the built in Oak Creek software will plot and log the sensor data in various formats: acceleration, temperature, pressure, strain and wavelength. For vibrational analysis, the acceleration data will be further processed through Fast Fourier Transformer (FFT) for spectral analysis. For more information please contact Optilab.

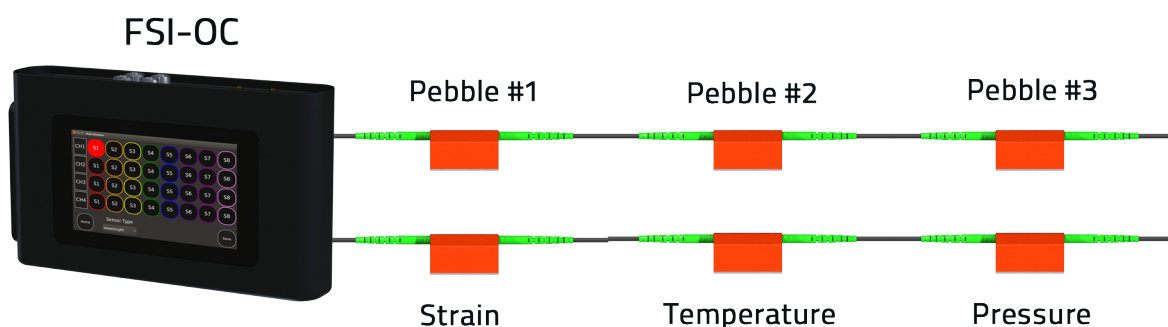
Features

- 10 kHz Sampling Rate
- 0.275 pm Resolution
- 70 nm Wavelength Range
- 4 Channels 8 FBGs Each
- Real Time FFT Processing
- Optimized for Pebble Accelerometer

Applications

- Structural Health Monitoring (SHM)
- Condition Monitoring System (CMS)
- Energy Systems Monitoring
- Production Equipment Diagnostics
- Hazardous Environments

Application Diagram



PATENT PENDING

Oak Creek Fiber Sensing Interrogator

OPTIONS

FSI-OC-X 1, 2, 4, 8
 # of Channels 4 (Standard)

TECHNICAL INFO

For technical info and support:

sales@optilab.com

www.optilab.com

WEB ORDER

To order, please visit OEQuest.com.



Optilab Advantage

- Innovation
- Performance
- Quality
- Customization
- Warranty

Performance Specifications	
Fiber Sensor Type (Fiber Bragg Grating)	Accelerometer, Temperature, Strain Pressure, Displacement
Minimum Gauge Spacing	5 nm
Number of Gauges per Channel	8 Max
Maximum Fiber Length	10 km
Number of Fiber Channels	Standard 4 (switched)
Wavelength Range	1515-1585 nm
Measurement Resolution	0.275 pm
Measurement Accuracy	± 1 pm
Sampling Range	10 kHz standard

Mechanical Specifications	
Operating Temperature	-20°C to +55°C
Storage Temperature	-40°C to +85°C
Dimensions (L X W X H)	290 mm X 58 mm X 170 mm
Weight	≤2.5 kg
Housing	Injection Molded Aluminum
Optical Connectors	FC/APC

Electrical Specifications	
Power Supply	+5V DC External Power Adapter Rechargeable Batteries
Rechargeable Battery	Lithium Ion Type
Monitoring	Sensor Time Domain (Waveform) FFT Plotted Data (Frequency)
Display	7" LCD Touchscreen
Battery Life	3 Hours Operation
Software	GUI Interface Oak Creek Ver. 1.1 (Included)

