FBG INTERROGAOR WITH LARGE WAVELENGTH RANGE

The FBG-Scope UC – IBS0.2 interrogator is designed for a large scale application and can measure up to 450 FBGs distributed on multiplexed optical channels. The device covers a wide wavelength range with an excellent resolution



MEASURABLE PARAMETERS

- Temperature
- Strain
- Vibration
- Pressure
- Displacement
- Inclination

APPLICATIONS (Monitoring)

- Civil engineering structures
- Energy generation and transportation
- Metallurgical process
- Railway and roadway infrastructure

GENERAL FUNCTIONALITIES

- Wide wavelength range to monitor a large number of sensors
- · Can be used as a high-resolution spectrometer
- Standard LabVIEW based software interface for wavelenght recording
- Customized graphical interface for temperature measurment



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OPTICAL SPECIFICATIONS

Number of optical channels	1, 2, 4, 8, or 16
Number of sensors per channel	Up to 70
Wavelength range	1510nm - 1590nm
Scan frequency	Up to 3 KHz
Dynamic range	30 dB
Resolution $1\sigma/1mn$	1 pm
Repeatability	Typical 3 pm, max 5 pm
Temperature drift	Typical 1 pm/°C, max 3 pm/°C
Optical connectors	FC/APC

ELECTRICAL, MECHANICAL, AND ENVIRONMENTAL SPECIFICATIONS

Operating temperature range	0°C to + 40°C
Communication interfaces (*)	USB 2.0
Dimensions	300 mm x 261 mm x 134 mm
Weight	2 kg
Power Supply	5 VDC (adapter for 230 V included)
Power Consumption	20 W Max

The best cost/performance ratio

