

# FBG Sensing Interrogator

## IFIS100

IFIS100 FBG Sensing Interrogator has been developed to meet the demand for measuring strain, temperature, pressure, acceleration and inclination in civil engineering, oil & Gas industries, Aerospace, Energy industries etc where both high accuracy / resolution and low cost are required. Most of various applications can meet the suitable solution with real-time monitoring system, IFIS100. It is a compact and highly robust interrogation system for dynamic and multi-points measurement of FBG sensors.

In addition to the standard commercial interrogation system, IFIS100 can be developed and designed flexibly for upgrade version to meet the requirement of demanding special applications.

### Features

- High Accuracy/ High Resolution
- High Measurement Speed Repeatability
- Wide Wavelength Range
- Scalability for Multi-sensing points
- Low Power Consumption
- OEM Versions Available
- Real-time Analysis
- User friendly Interface



High speed real-time  
monitoring system

## Applications

- Civil Engineering (Bridge, Building, Dam, Power cable, Tunnels, etc)
- Oil and Gas Industries
- Energy Industries (Wind turbines, Pipelines, Nuclear plants, etc)
- Security Industries
- Transportation Industries (Rail road, Subway, etc)
- Aerospace/ Marine Vessels Industries.
- Military Industries

## Specification

Wavelength Range	1510 - 1595 nm
Wavelength Accuracy	< 10pm
Resolution	1pm
Number of FBG	24/fiber core x N
Repeatability	< 3pm
Number of Sensor Channel	1, 3, 5, 7, 15
Sampling Frequency	1ch : 100Hz, 3ch: 50Hz, 7ch: 25Hz, 15ch: 2Hz
Maximum Sampling Rate	100Hz
Dynamic Range <sup>1)</sup>	25dB
User Interface	USB 1.1, RS-232
Power Handling	Max. -20dBm/ Min. -70dBm
Power Supply	AC 85 ~ 264V / DC 5V
Dimension	88 x 225 x 380 mm

1) Optical Power Dynamic range (-20dBm ~ -70dBm): 50dB

## Ordering Code

### IS7100 - (1) - (2)

1. Number of sensor channel: 1(1 ch), 3(3 ch), 7 (7ch), 15(15ch)
2. Connector type: F/P (FC/PC type), F/A (FC/APC)

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