

FBG-Scan 700 / 800

Description

The FBG-Scan 700 or 800 is a dynamic, high accuracy measurement device for Fibre Bragg Grating (FBG) sensors. The system can measure up to 40 FBG sensors using 2 input channels. Both input channels are simultaneously monitored using an optical coupler at a scan rate up to 1000Hz.



The sampling is done by using the internal clock or can be controlled by an external trigger signal to synchronise the measurements with other devices.

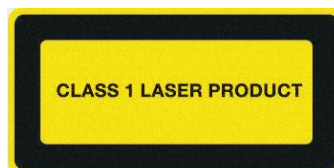
The system is delivered together with the 'IllumiSense Wave' software which exists of an user friendly user interface to read out the spectral information from a laptop over USB 2.0 and calculate the peak wavelengths in real time. Furthermore, the system is also compatible with the 'ILLumiSense Strain' software (optional) which can be used to convert the wavelength data into temperature compensated strain data.

Features

- Fibre optic measurement device for FBG sensors.
- High dynamic range
- High sampling rate
- External triggering
- High number of sensors
- High wavelength accuracy.
- Excellent wavelength precision

Laser Safety Information

This device is a Class 1 laser product according to IEC 60825-1 (2001).



Standard specifications

Parameter	FBG-Scan	
	700	800
Optical		
Wavelength range	1525-1565 nm	1515-1590 nm
Number of Bragg sensors	40	
Number of channels	2 (same optical line: 1x2 optical coupler)	
Wavelength precision	±1 pm	
Absolute wavelength accuracy (EOL)*	±30 pm	±40pm
Dynamic range	30 dB with user selectable control	
Scan and report rate	1000 Hz	
Optical connector	FC/APC	
Laser Class (IEC 60825-1)	1	
Electrical		
Communication	USB2.0	
Trigger signal	TTL signal (3.3V), SMA connector	
Power supply	5 VDC	
Environmental		
Operating temperature	10°C to 40°C	
Operating Humidity	0% to 80%, non-condensing	
Storage Temperature	-10°C to 60°C	
Storage humidity	0% to 95%, non-condensing	
Mechanical		
Dimensions	260 mm x 230 mm x 60 mm	

* Higher absolute End Of Life wavelength accuracies available on request

Ordering information

Example:

F	B	G	-	S	C	A	N	-	X	0	0
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Wavelength range	
7	1525-1565 nm
8	1515 - 1590 nm

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