

FBG-Scan 708/716

Description

The FBG-Scan 7-series is a complete industrial, static and high accuracy measurement device for monitoring Fibre Bragg Grating (FBG) sensors in real field applications. It can monitor 8 or 16 different optical lines containing each multiple FBG-sensors. The device is controlled by an internal embedded PC.



The system contains a broadband light source and performs spectral analysis by means of an InGaAs detector array and a spectrometer platform. The input channel to be monitored can be selected by means of an optical switch. The internal Optical Spectrum Analyzer (OSA) is capable of performing FBG-peak detection with high accuracy. In addition, the optical spectrum of each input channel can be displayed. Both the updating rate of the OSA as well as the switching rate of the optical switch can be adjusted.

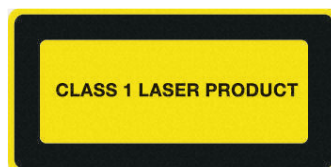
'ILLumiSense Pro' is included in the FBG-Scan 708/716 and provides your optical sensor network tools for data acquisition, analysis and computation. Easy to use due to intuitive data display, data visualisation features and additional graphing. 'ILLumiSense Pro' is a combination of traditional sensor software combined with the specific needs for your optical sensor system.

Features

- Fibre optic measurement device for up to 8 or 16 optical lines
- High number of sensors
- Embedded processing board with monitoring software
- High dynamic range
- Excellent wavelength precision and accuracy

Laser Safety Information

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



Standard specifications

Parameter	FBG-Scan			
	708	708+	716	716+
Optical				
Wavelength range	1525 to 1565* nm			
Number of Bragg sensors	40			
Number of channels	8		16	
Wavelength precision	± 1pm			
Absolute wavelength accuracy (EOL)	±30pm	±15pm**	±30pm**	±15**
Dynamic range	30dB with user selectable control			
Scan and report rate	< 1Hz			
Optical connector	FC/APC			
Lifetime Optical switch	> 10 ⁸ cycles			
Laser Class (IEC 60825-1; 2001)	1			
Electrical				
Power supply	230 VAC			
Environmental				
Operating temperature	0°C to +50°C			
Operating Humidity	0% to 80%, non-condensing			
Storage Temperature	-10°C to +60°C			
Storage humidity	0% to 95%, non-condensing			
Mechanical				
Dimensions (H x W x D)	41 mm x 424 mm x 300 mm (19 inch compatible)			
Embedded PC				
Intel Atom Processor	1.6 GHz			
Memory	1 Gb			
Communication	2 x USB 2.0 – 1 x RS232 – Ethernet – 1 x VGA			

* Extendable on request

** With integrated optical reference cell

Ordering information

Example:

F	B	G	-	S	C	A	N	-	7	x	x	x
---	---	---	---	---	---	---	---	---	---	---	---	---

	Number of channels	Absolute wavelength accuracy
708	8	±30 pm
716	16	±30 pm
708+	8	±15 pm
716+	16	±15 pm

FOS&S BVBA reserves the right to make changes without further notice to any products herein. FOS&S BVBA 2009. All rights reserved.