

Measurement Device FBG-scan 708D / 808D

Fibre Bragg Gratings reinvented

Draw Tower Gratings (DTG[®]s) are produced during the drawing process of the fibre itself, before the primary coating is applied. This is a cost effective production process for high quality Fibre Bragg Gratings. This offers unique characteristics such as extremely high breaking strength, insensitivity to bending, spliceless array configurations and uniform coating coverage. FBG parameters and coating material can be selected based on customer needs.



Description

The FBG-Scan 708D / 808D is an industrialised, high precision measurement device for dynamic measurements of optical fibre sensors in real field applications.

The system can monitor 8 separate optical lines. The device is controlled by an internal PC and samples all sensors at 250 Hz. A dedicated interface protocol communicates the measurement data over TCP/IP to a data server.

Features

- Fibre optic measurement device for up to 8 optical lines
- Dynamic measurements up to 250 Hz
- Embedded processing board with monitoring software
- Data transmission over Ethernet (TCP/IP)
- High dynamic range
- Excellent wavelength precision

Laser Safety Information

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

**CLASS 1
LASER PRODUCT**



Standard Specification

Parameter	FBG-Scan	
	708D	808D
Optical		
Wavelength range	1525-1565 nm	1510-1590 nm
Minimum wavelength spacing ¹	0.4 nm	0.8 nm
Number of channels	8 (individual channels)	
Wavelength precision	±1 pm	
Absolute wavelength accuracy (EOL) ²	± 30 pm	± 40 pm
Dynamic range	30 dB with user selectable control	
Scan and report rate	250Hz	
Optical connector	FC/APC	
Laser class (IEC 60825-1)	1	
Electrical		
Maximum power consumption	40 W	
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 369 mm (19 inch compatible)	
Communication		
Communication port	Ethernet	

¹ Based on FBG with FWHM of 100 pm.

² Higher absolute End Of Life wavelength accuracies available on request.

Ordering information

Example:

F	B	G	-	S	C	A	N	-	X	0	8	D
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Wavelength range	
7	1525-1565 nm
8	1510-1590 nm

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