

## FBG-scan 704

### Description

The FBG-Scan 704 is a dynamic, high accuracy measurement device for Fibre Bragg Grating (FBG) sensors. The system can measure up to 4 optical channels with 40 FBG sensors per channel. Each sensor can be monitored with a scan rate of 10Hz.



The system contains a broadband light source and performs spectral analysis by means of an InGaAs detector array and a spectrometer platform. 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 real time. The internal optical switch is controlled over RS232 communication.

### Features

- Fibre optic measurement device for FBG sensors.
- High dynamic range
- High number of sensors
- High wavelength accuracy.
- Excellent wavelength repeatability

## Standard specifications

| Parameter                          | FBG-Scan 704                |
|------------------------------------|-----------------------------|
| Wavelength range                   | 1515-1590 nm                |
| Number of Bragg sensors            | 160                         |
| Number of channels                 | 4                           |
| Wavelength repeatability           | ±1 pm                       |
| Absolute Wavelength accuracy (EOL) | ±40 pm (Typ. ±25)           |
| Relative Wavelength accuracy       | ±20 pm (Typ. ±15)           |
| Dynamic range                      | 30dB with user selectable   |
| Scan and report time               | 10 Hz                       |
| Optical connector                  | FC/APC                      |
| Power supply                       | 5 VDC                       |
| Operating temperature              | 10 °C – 40 °C               |
| Operating Humidity                 | 0 % to 80 %, non-condensing |
| Storage Temperature                | -10 °C to 60 °C             |
| Storage humidity                   | 0 % to 95 %, non-condensing |
| Dimensions                         | 260 mm x 230 mm x 60 mm     |
| Spectrometer                       | USB2.0                      |
| Optical switch                     | RS232                       |

## Ordering information

|   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|
| F | B | G | - | S | C | A | N | - | 7 | 0 | 4 |
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