Fiber Bragg grating demodulation device

The demodulation algorithm based on 3 × 3 coupler in a fiber-optic hydrophone array has gained extensive attention in recent years. The traditional method uses a circulator to construct the normal ...

A three-points tracking-based high-speed fiber Bragg grating (FBG) demodulation method based on wavelength-tunable laser is proposed. The wavelength-tunable laser scans just three ...

In this paper, a photoelectric conditioning circuit for fiber Bragg grating demodulation is designed. The experimental results show that this method can accurately demodulate fiber Bragg ...

Fiber Bragg gratings are reflective structures in the core of an optical fiber with a periodic or aperiodic perturbation of the effective refractive index.

This article presents a new demodulation method from the reflection specklegrams of fiber Bragg grating (FBG)-based sensors by employing convolutional neural ne

We demonstrated in this work a filterless, multi-point and temperature-independent FBG (fiber Bragg grating) dynamical demodulator using pulse-width-modulation (PWM).

It uses a scanning narrow-band semiconductor laser as light source to perform high-resolution fiber grating demodulation in the range of 40nm. It is designed for static FBG measurement and can be ...

Spectral interrogation of fiber Bragg gratings (FBGs) in the ~850 nm band remains relatively uncommon, largely due to the limited availability of commercial instruments and the restricted applicability of ...

We demonstrated in this work a filterless, multi-point and temperature-independent FBG (fiber Bragg grating) dynamical demodulator using pulse-width ...

A demodulation algorithm is vital for a fiber Bragg grating (FBG) sensing system. In this paper, a novel demodulation algorithm based on the variable-step-size method and cross-correlation algorithm is ...

Fiber Bragg grating (FBG) is a relatively novel method used for network health monitoring that has a number of advantages including high accuracy, multiplexing, electromagnetic interference ...

Fiber Bragg grating demodulation device

Web: https://www.csc-energia.com.pl