

We propose an ultra-high-speed demodulation system of the weak fiber Bragg grating (wFBG) sensor utilizing an 8-channel multi-wavelength reconstruction-equivalent-chirp distributed feedback (REC ...

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 ...

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 ...

The OFSCN#174; Fiber Bragg Grating Interrogator is an industrial ...

A demodulation system built upon the F-P filter has a relatively slow demodulation frequency, leading to demodulation errors when measuring high-frequency changing physical ...

In this article, a tracking-based high-speed demodulation method for FBG sensing systems based on the wavelength-tunable laser is proposed. The wavelength-tunable laser only ...

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 ...

The OFSCN#174; Fiber Bragg Grating Interrogator is an industrial-grade demodulation unit designed to provide high-precision wavelength measurements for various fiber optic sensing ...

It has high temperature measurement accuracy, short response time, anti-electromagnetic interference, electrical insulation, and intrinsic safety. It has the characteristics of explosion-proof, so it can be ...

This paper presents a novel hybrid demodulation scheme for quasi-distributed fiber-optic acoustic sensor utilizing ultra-weak fiber Bragg grating (UWFBG) arrays as the discrete reflectors.

This review highlights key breakthroughs in achieving high spatial resolution and high-speed interrogation through hybrid multiplexing, aliased spectrum reconstruction, and dispersion ...

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