

An All-Fiber RF Modulation Technique: Frequency Response Calibration of Optical Detectors

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Two all-fiber Mach-Zender interferometers have been designed to generate RF modulated light at 633 nm and 830 nm. The interferometers are scanned with a piezoelectric tube driven at its fundamental frequency of resonance. The actual experimental arrangement covers the frequency range 1 kHz to 1 GHz. The technique combines several interesting features as the simplicity, the stability and reliability of all-fiber systems and the use of low-frequency electronics to control and generate the RF modulated light.

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