# A Portable Real-Time Polarimeter by the Use of the Spinning Waveplate Method

## Department of Electronics

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#### Introduction

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#### Section 1

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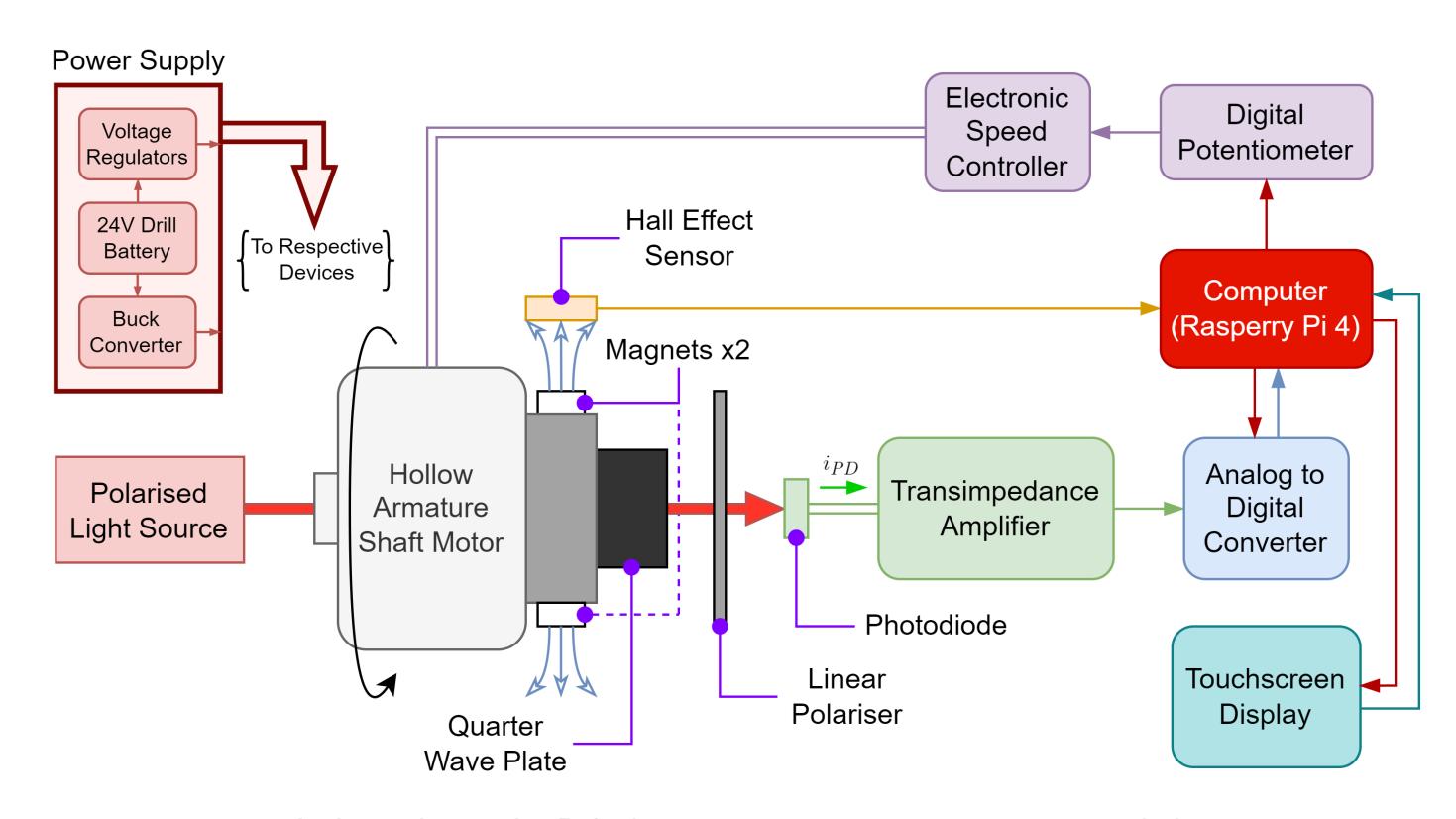


Figure 1: Labelled tilted FBG diagram; operating principles and dimensions.

#### Highlight Section

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$$L = \sum_{i=0}^{N-1} |P_{i+1} - P_i| \tag{1}$$

#### Section 2

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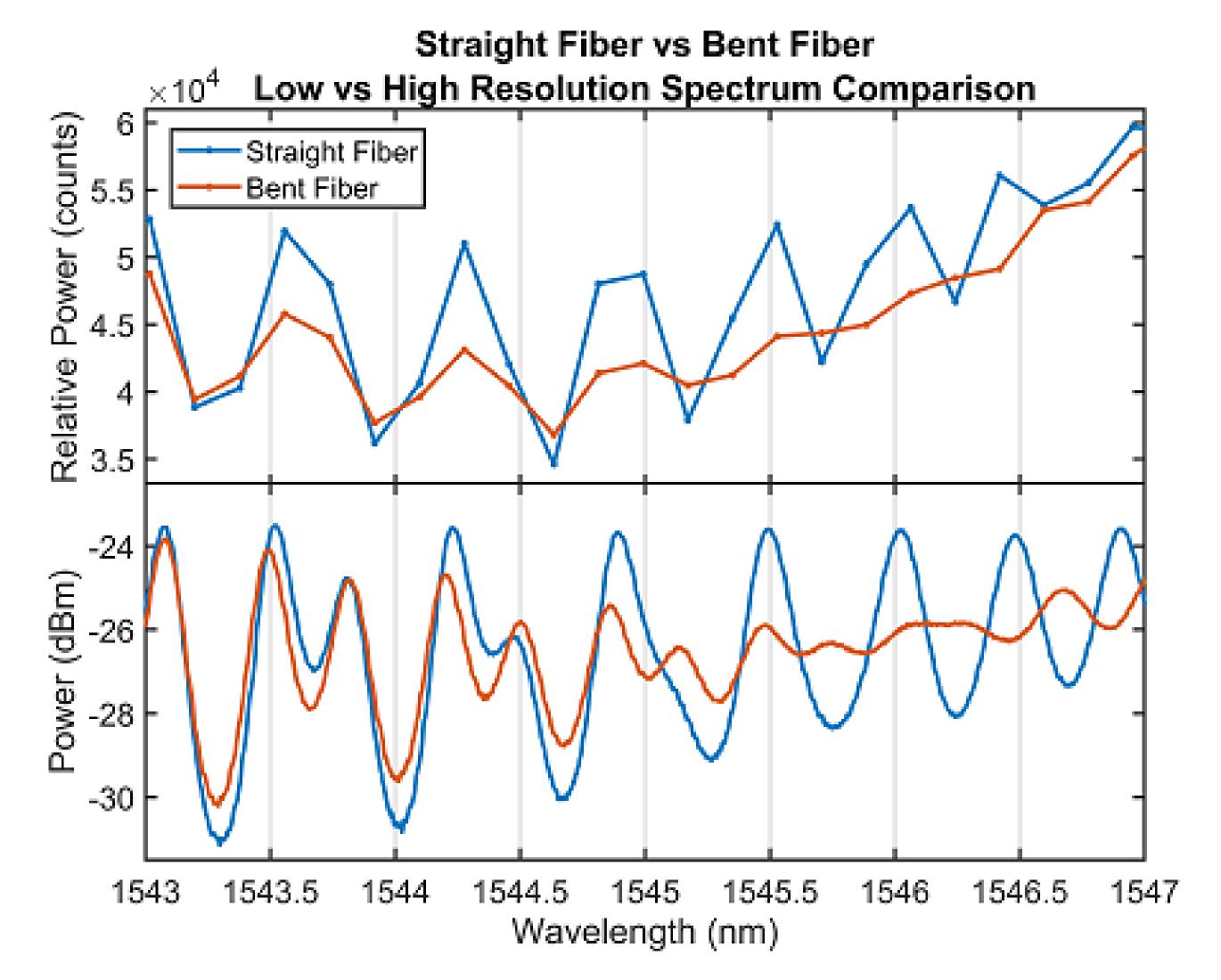
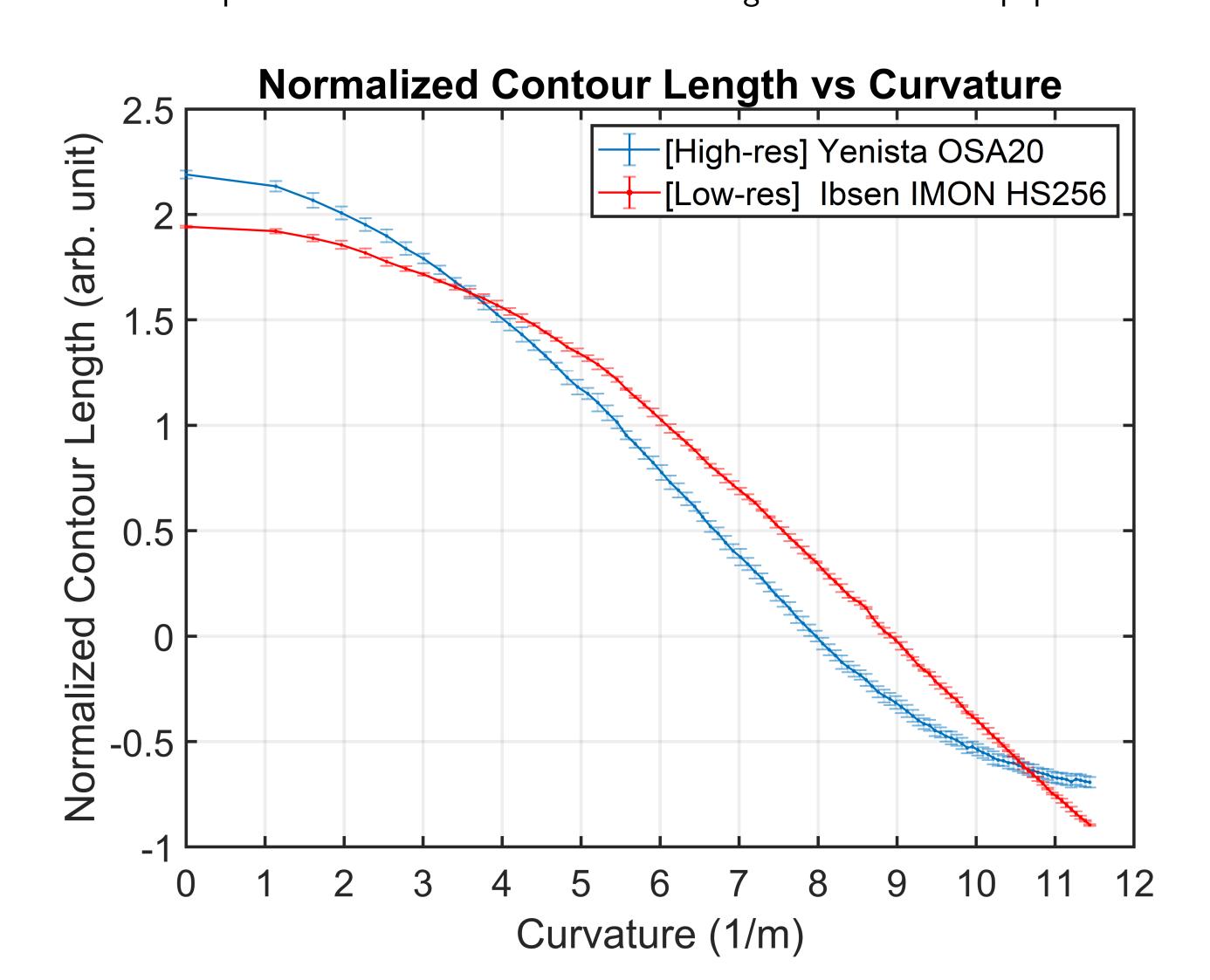


Figure 3: When bending is introduced to a  $3\,\mathrm{mm}$ ,  $4^\circ$  TFBG the peak prominence decreases. This phenomena can still be observed using low-resolution equipment.



#### Section 4

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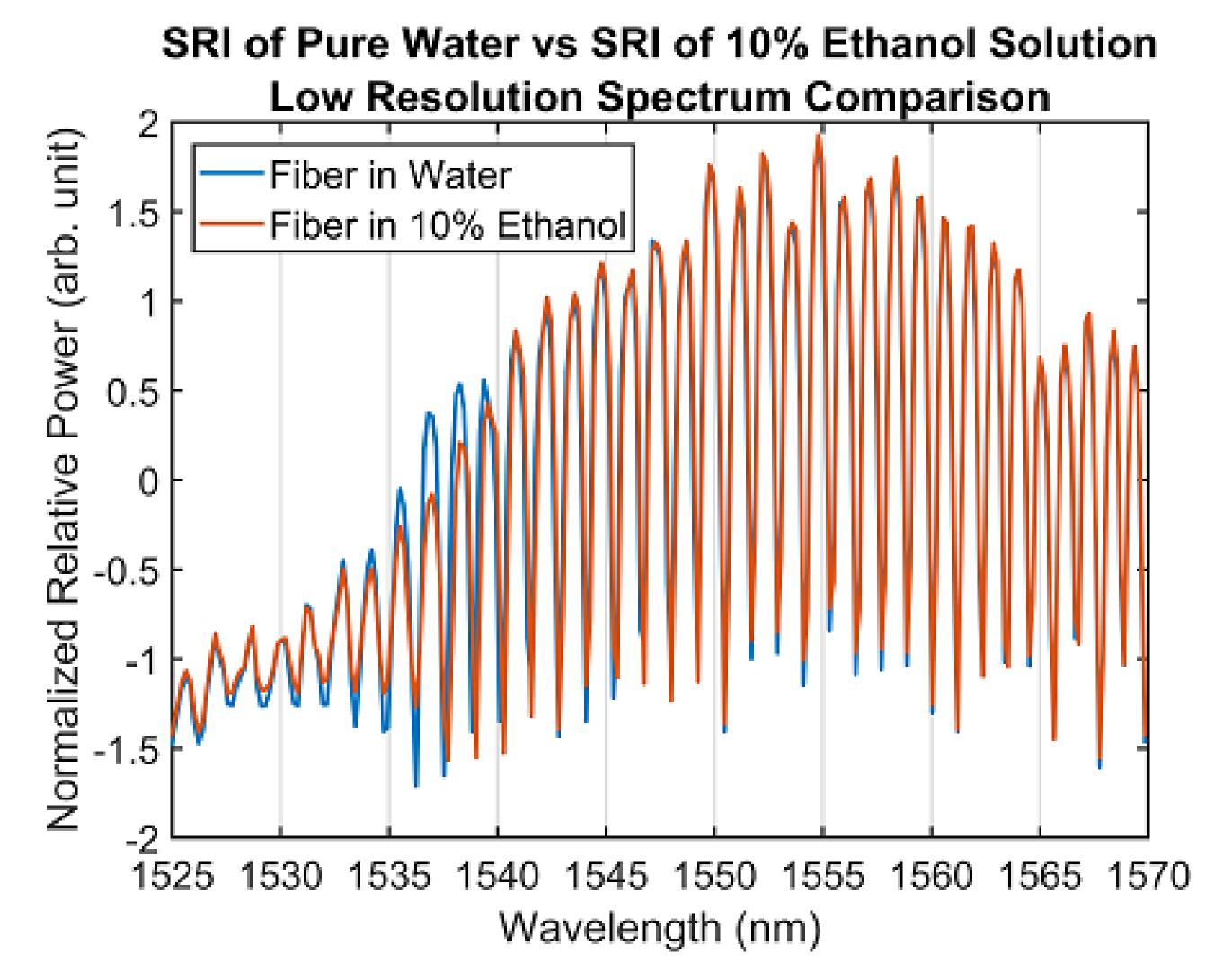


Figure 6: Ethanol has a slightly higher refractive index than water. This small increase leads to a large change in the TFBG spectra.

