

# COMPACT OCT OPTICAL SPECTROMETER

## PRELIMINARY PRODUCT DATA SHEET

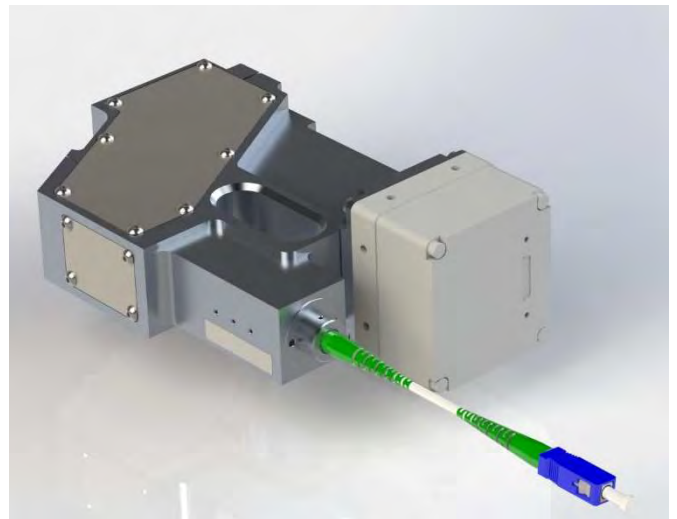
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The Gooch & Housego Optical Spectrometer is a high resolution, flexible platform for spectral analysis of fiber coupled signals.

Based on a high quality transmission diffraction grating, the spectrometer unit allows high resolution spectral analysis in a robust and reliable package.

Designed to be incorporated into any OEM modular system architecture with applications in optical coherence tomography (OCT), gas detection and many other industrial, medical or scientific applications.

The optical input is via a fiber optic pigtail which can be specified to length and terminated with all commonly used optical connectors. The line scan camera detection unit is selected to provide optimum performance for the chosen operating wavelength range and resolution or may be specified by the customer.



### Key Features

- Optical wavebands covered:
  - 850 nm
  - 1060 nm
  - 1310 nm
- Resolution <0.1 nm
- Wide operating temperature range

### Key Benefits

- High resolution
- High optical efficiency
- Compact design
- Fiber coupled input

### Applications

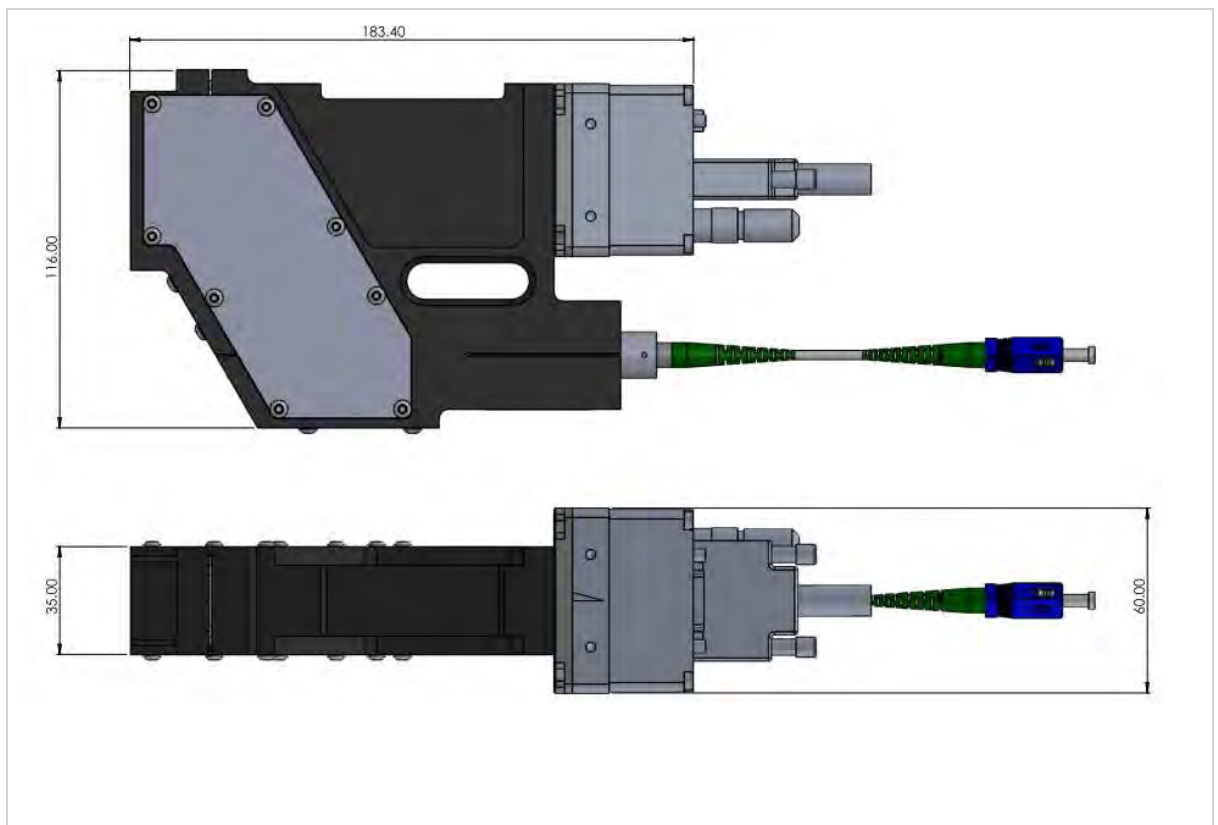
- OCT
- Medical diagnostics
- Industrial spectral analysis
- Gas sensing
- Scientific

## Typical Specifications

Parameter	Value	Notes
Wavelength ranges	850, 1060 and 1310 nm	Typical spectral bandwidth $\pm 50$ nm
Optical input power	< 10 mW	
Efficiency of optical train	> 60%	
Wavelength resolution	< 0.1 nm/pixel	Dependent on combination of dispersive element, imaging optics and camera
Optical fiber input	Single-mode fiber	
Number of pixels	512 / 1024 / 2048	Options available
Line rate	~ 70 KHz	Camera dependent
Operating temperature range	+10°C to +45°C	Typical
Dimensions	See mechanical outline	Overall dimensions depend on camera

## Mechanical Outline

Mechanical outline including camera; excluding connector.



For further information

E: [oct@goochandhousego.com](mailto:oct@goochandhousego.com)

[goochandhousego.com](http://goochandhousego.com)