

Hyperspec® Solar Induced Fluorescence Sensor

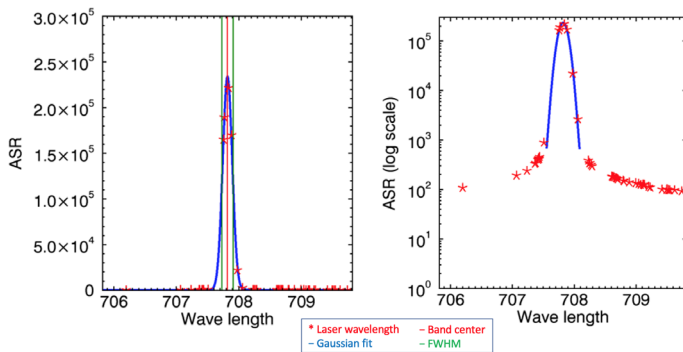
Product Datasheet



OSA
The Optical Society
Paul F. Forman
Team Engineering
Excellence Award

- Designed for Chlorophyll Fluorescence Imaging
- All-reflective concentric imager design
- Spectral resolution: ≤ 0.2 nm (avg FWHM)
- Spatial pixels: 1,600
- Spectral pixels: 2,134
- Scientific-grade data for O_2 -A and O_2 -B
- Spectral passband: 671-780 nm
- Weight: 5.4 kg / 11.9 lbs
- Size: 297 x 200 x 158 mm

PRODUCT DATA SHEET



Headwall's Solar-Induced Fluorescence (SIF) imaging sensor excels at collecting data present in the Oxygen-A and Oxygen-B bands where weak but valuable fluorescence signals are found. With this data, environmental scientists can gain a better understanding of plant physiology and stress.

Courtesy NASA-Goddard GLAMR (Goddard's Laser for Absolute Measurement of Radiance)

Hyperspec[®] Solar-Induced Fluorescence Imaging Sensor

Wavelength range (nm)	671-780
Spectral Sampling Interval (nm/pixel)	0.051
Spectral Resolution (avg across full spectrum, nm, FWHM)	≤ 0.2
Working f-Number	f/2.5
Angular FOV (swath width)	23.5°
Spectral pixels	2,134
Number of un-binned spatial pixels	1,600
FPA Technology	TE-cooled sCMOS
Maximum Frame Rate, no binning, using High-Capacity HDPU (Hz)	≤ 100
Camera Bit Depth	16
Continuous Power Consumption, excluding data system (W)	≤ 20
Input Voltage (V)	12 to 24
Shutter	electro-mechanical
Lens	Headwall 25mm VNIR Telecentric
Camera Interface	Full Cameralink (80-bit)
Operational Temperature Range (° C)	+10 to +40
Athermalization	Passive by design; soak @ equilibrium assumed
Operational Humidity	10 - 95% RH
Weight (spectrometer only, kg / lbs)	5.4 / 11.9
Size (spectrometer only, mm / inch)	297 x 200 x 158 / 11.8 x 7.9 x 7.9

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Manufactured by Headwall Photonics, distributed in the UK and Ireland by **analytik**.