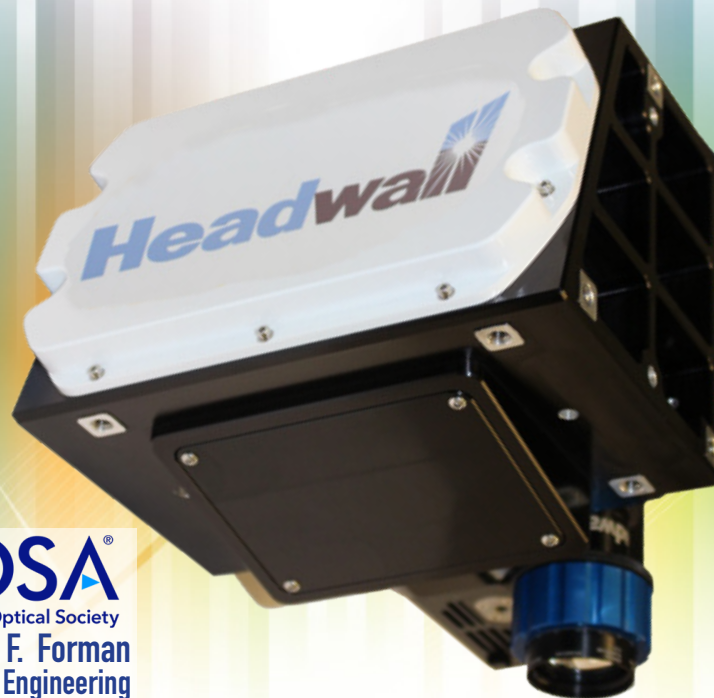


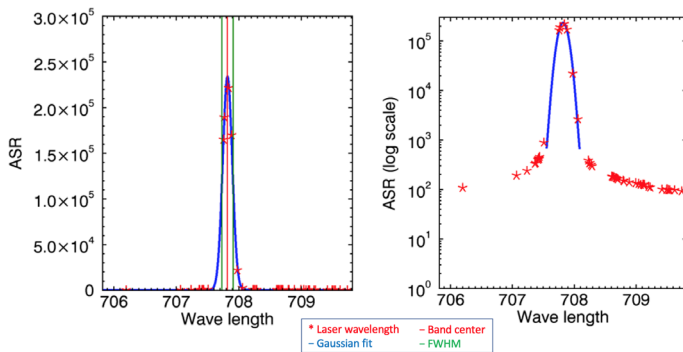
## Solar-Induced Fluorescence Imaging Sensor

### Product Datasheet



- Designed for Chlorophyll Fluorescence Imaging
- All-reflective concentric imager design
- SNR: 120:1, *unbinned*
- Spectral resolution: 0.1 - 0.2 nm (FWHM)
- Spatial pixels: 1,600
- Spectral pixels: 2,134
- Scientific-grade data for O<sub>2</sub>-A and O<sub>2</sub>-B
- Spectral passband: 671-780 nm
- Weight including lens: 6.3kg / 13.9 lb.
- Size: ≤ 300 x 200 x 200 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 Laserfor Absolute Measurement of Radiance)

## Hyperspec® High-Resolution SIF Imaging Sensor

Wavelength range (nm)	671-780
Spectral Sampling Interval (nm/pixel)	0.051
Spectral Resolution (nm, FWHM)	0.1 – 0.2
Signal to Noise (unbinned)	120:1
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)	66
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 (including 25mm VNIR telecentric lens)	6.3kg / 13.9 lb.
Size (mm / inch)	≤ 300 x 200 x 200 (11.8 x 7.9 x 7.9)

January 2021

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