Chlorophyll Florescence Sensor

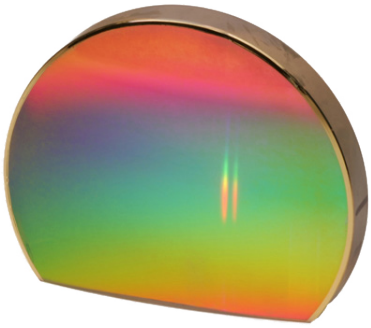
Product Datasheet

- Designed for Chlorophyll Fluorescence Imaging
- All-reflective concentric imager design
- SNR: 120:1, *unbinned*
- Spectral resolution: 0.1 - 0.2nm (FWHM)
- Spatial pixels: 1,600
- Spectral pixels: 2,160
- Scientific-grade data for O_2-A and O_2-B
- Spectral passband: 670-780nm
- Weight including lens: 6.3kg / 13.9 lb.
- Size in mm: ≤ 300 x 200 x 200

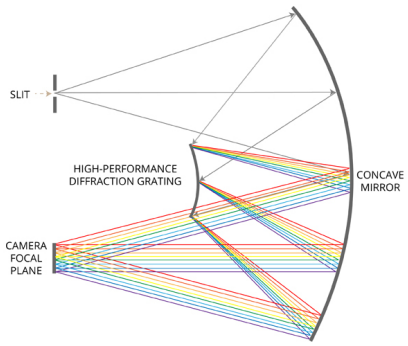
PRODUCT DATA SHEET

Hyperspec® High-Resolution Chlorophyll Fluorescence Sensor	
Spectral Passband (nm)	670-780
Spectral Sampling Interval (SSI) (nm/pixel)	0.051
Spectral Resolution (nm, Full Width at Half Maximum-FWHM)	0.1 - 0.2
Signal to Noise (unbinned)	120:1
Working f-Number	f/2.5
Spectral pixels	2,160
Number of un-binned spatial pixels	1,600
FPA Technology	TE-cooled sCMOS
Angular FOV (swath width)	23.5°
Maximum Frame Rate with on-camera spatial bin of 2, or 800 spatial pixels (Hz)	66**
Camera Bit Depth	16
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 in mm (inches)	≤ 300 x 200 x 200 (12 x 8 x 8)
Continuous Power Consumption (W)	≤ 30 (exclusive of data system)
Shutter	electro-mechanical
Lens	Headwall 25mm VNIR Telecentric
Camera Interface	Full Cameralink, 80 Bit

** Specified using Headwall's Compact HDPU suitable for specific UAV applications. Faster frame rates can be achieved with Headwall's larger HDPU, suitable for manned aircraft deployment.



Headwall-manufactured diffraction gratings manage reflected light with exceptional precision and resolution.



Headwall's concentric design layout using mirrors and gratings provides aberration-free imaging and a wide field-of-view.

Telecentric lens provides a perfectly matched exit pupil that eliminates unwanted image artifacts.

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