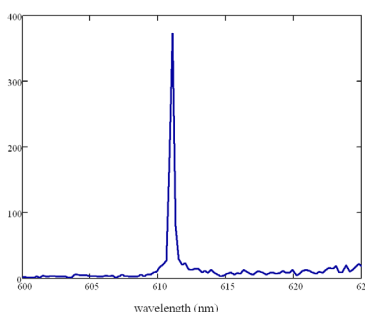


FOHSI-UV

Fiber Optic Hyperspectral Imager (UV/Visible)

SPECIFICATIONS

Hyperspectral Datacube	25x36 spatial; 90 spectral
Spectral Range	300 – 540 nm
Spectral Resolution	6 nm/bin (average)
Field-of-view	7°H x 7°V (variable)
Hypercube Rate	Up to 2,000/sec
Temporal Resolution	0.5 ms
Camera Interface	CoaXPress
Dimensions	6" W x 6" H x 36" L
Power	120VAC;
Weight	26 lbs



Fiber optic reformatter captures images and reformats them into 6 slits. Slits are passed through a multislit spectrometer. Data is collected with an image intensified high speed camera at 2000 fps.

APPLICATIONS

- **Combustion Monitoring**
- **Astronomical Research**
- **Gas Detection**
- **Kill Assessment**
- **Homeland Security**

FIBER OPTIC REFORMATTED HYPERSPECTRAL IMAGING SPECTROMETER

High Resolution Broadband Spectroscopy

The FOHSI is an innovative application of our patented HyperPixel Array imaging spectrometer, designed to capture high resolution spectral data of fast, dynamic processes such as combustion. The Fiber Optic cable allows insertion of the sensor input directly into a machine or combustion chamber.

The design provides 3-dimensional hyperspectral datacubes (2 spatial, 1 spectral) without scanning, allowing high temporal and spectral resolution analysis of transient events. Data is collected with an image intensified high speed camera at 2,000 fps.

This UV/vis High Frame Rate Hyperspectral Imager is a custom imaging system designed to monitor short-lived radical species in combustion zones. It incorporates a high-speed image-intensified camera capable of capturing temporal changes as fast as 500 μ s.

Key capabilities include 25x36 spatial resolution with spectral data acquisition covering 300-540nm. This enables monitoring of chemiluminescence from short-lived radicals such as OH + , CH + and C 2 +.