

# EYE-520 Advanced Coherent Technologies

## Hyperspectral Imaging System

The EYE-520 gimbal is designed for hyperspectral shortwave infrared (SWIR) imaging applications from 0.9  $\mu\text{m}$  to 1.7  $\mu\text{m}$ . Using a pushbroom sensor, the system can generate SWIR image cubes of 300 spatial x 70 spectral pixels along the flight line and is ideal for chemical detection applications.

### Key Features

- Tier 2 UAV capable - small, lightweight, low power
- Sony video camera with variable zoom
- ACT payload designed with standard Cloud Cap TASE400e<sup>®</sup> gimbal
- Cloud Cap ViewPoint<sup>®</sup> compatible
- Purchase with ACT PPM-100 for complete system with real-time target detection using SWIR spectral match filters



Automatic Target Detection



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Seeing *Beyond* the Surface

## SWIR Spectrometer (Headwall)

Spectral Range	900 to 1700 nm
Focal Length	100 mm
f/#	f/2.8
Spatial FOV	6.15 deg
Instantaneous FOV	0.2475 mrad
Focal Plane	640 x 480 pixels, 25 $\mu$ m pixel size FLIR Tau SWIR Imager
Spatial Resolution	23 mm (9") in at 3000 ft.
Field of View	10.7 nm, 75 possible bands
Frame Rate	75 Hz

## Payload Specifications

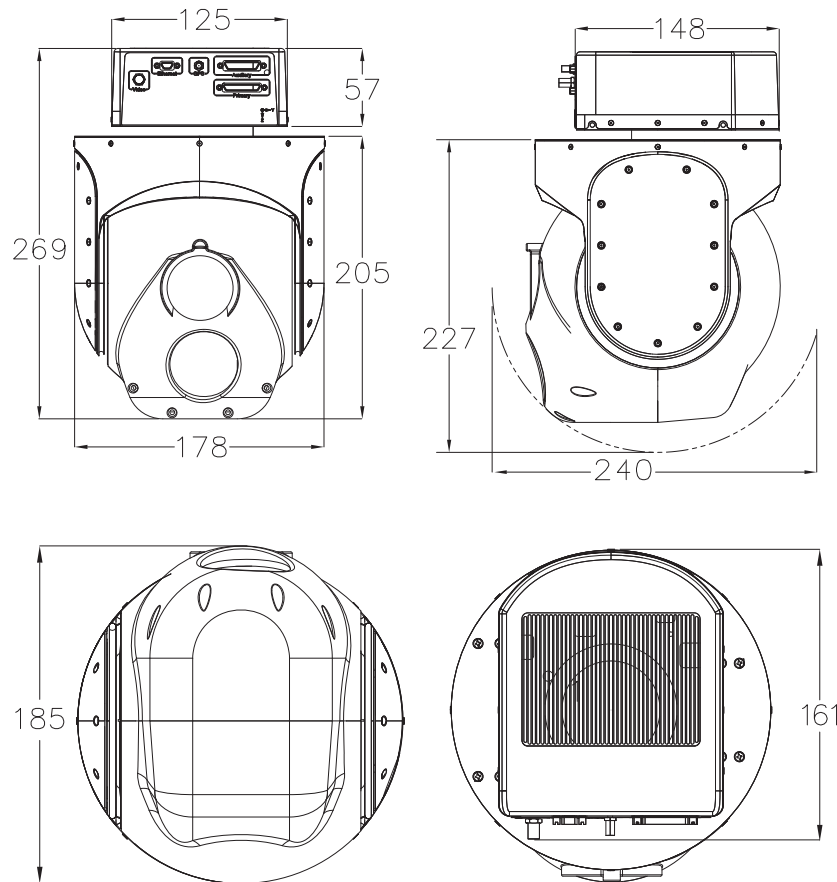
Size	178 x 185 x 269 mm
Diameter	185 mm
Weight	8 lb
Power	<100 watts (steady state) ~180 watts (peak)

## Video System

Camera	Sony FCB_EX1020
Chip	Sony 1/4-type EXview HAD CCD
Zoom	36x optical zoom
Data Format	NTSC Video - 30 Hz

## Payload Performance

Slew Rate	150 deg/sec
Payload Stabilization	2-axis, <75 $\mu$ RAD jitter
Rotation Limit	360 deg continuous pan



Measurements displayed in mm



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