

# EYE-530 Advanced Coherent Technologies

## Multi- & Hyperspectral Imaging System

The EYE-530 gimbal is designed for the simultaneous collection of hyperspectral shortwave infrared (SWIR) from 0.9  $\mu\text{m}$  to 1.7  $\mu\text{m}$  and visible/near-infrared multispectral imaging. This gimbal has the same linescan SWIR of the EYE-520 with one RGB CCD and one full-resolution CCD for the near infrared. This gimbal provides the flexibility to perform over land and water, with the ability to use visible thru shortwave infrared spectral analysis.

### Key Features

- Tier 2 UAV capable - small, lightweight, low power
- Fixed focus video camera
- 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 Visible and/or SWIR spectral match filters



# EYE

530



ADVANCEDCOHERENT  
TECHNOLOGIES

Seeing *Beyond* the Surface

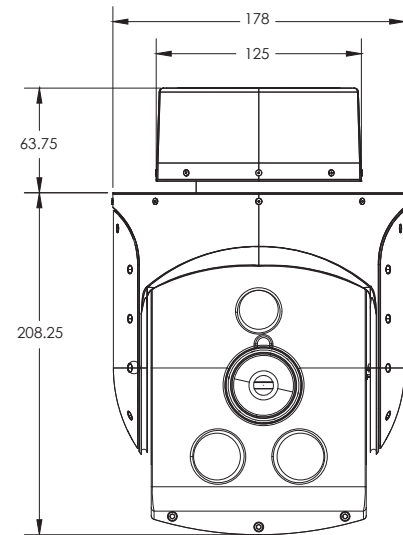
## Low Contrast System

Prosilica Cameras	Two synchronized, 12-bit CCD cameras with selectable filters and/or polarizers
Spectral Region	VNIR, 400-850 nm
Spectral Bands	Preconfigured bands depending on mission. Bandwidths range from 10 nm to >40 nm
Image Size	1360 x 1024 pixels, 6.45 $\mu$ m pixel size
Spatial Resolution	Multiple lenses are available, ranging from 8-100 mm, delivering resolutions (GSD) from 19-2.2 inches from a 2000 foot altitude
Field of View	Ranging from 5.5-50 degrees full angle depending on lens selection
Frame Rate	Up to 3 frames per second (processing dependent)



## 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

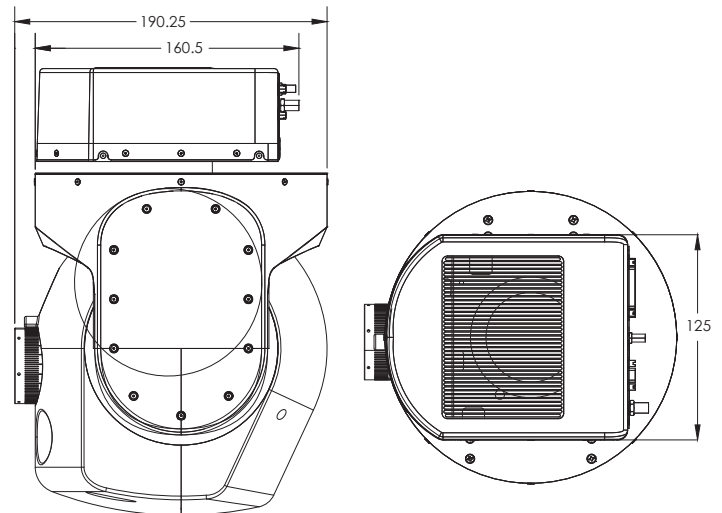
Size	178 x 190.25 x 272 mm
Diameter	190.25 mm
Weight	9 lb
Power	<100 watts (steady state) ~180 watts (peak)

## Video System

Camera	Marshall Electronics V-1255
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



**ADVANCED COHERENT**  
TECHNOLOGIES

**For more information:**  
Advanced Coherent Technologies  
2830 Shelter Island Dr.  
San Diego, CA 92106  
USA  
P: +1.619.450.8983  
E: sales@Advanced-Coherent.com  
www.Advanced-Coherent.com

