

EYE-540 Advanced Coherent Technologies

Vis-SWIR Multispectral Imaging System

The EYE-540 gimbal is designed for the simultaneous collection of multispectral images for the visible through shortwave infrared from 0.4 μm to 1.7 μm . This gimbal has two SWIR cameras with one RGB CCD and one full resolution CCD for the near infrared. This turret 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[®] gimbal
- Cloud Cap ViewPoint[®] compatible
- Purchase with ACT PPM-100 for complete system with real-time target detection using visible and/or SWIR spectral match filters



Visible RGB



SWIR RGB

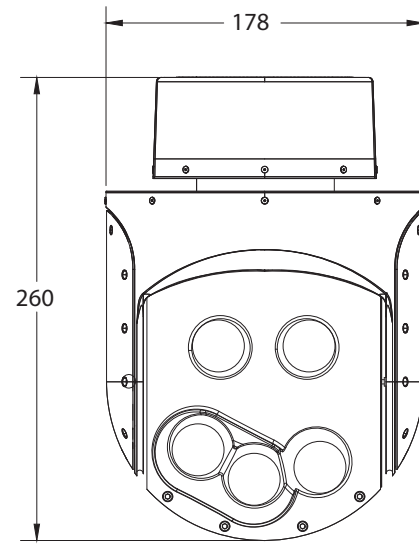


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Seeing *Beyond* the Surface

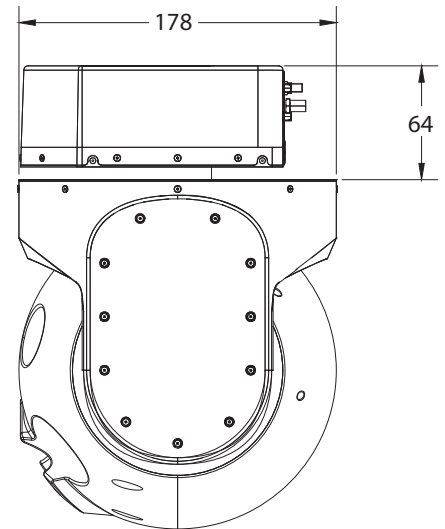
Low Contrast System

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 μm 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)



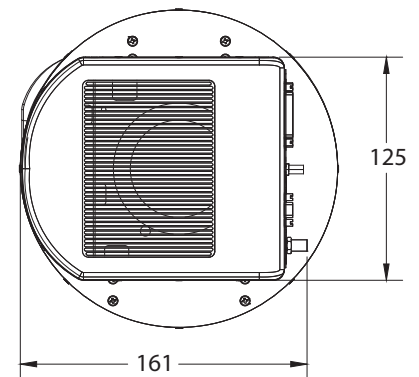
Micro-SWIR Camera

Spectral Range	Standard, 0.9 μm to 1.7 μm NIR/SWIR, 0.7 μm to 1.7 μm
Focal Length	100 mm
f/#	f/5.6
Image Size	640 x 512 pixels, 12.5 μm pixel size
Frame Rate	up to 30 Hz full frame rate
Output Format	12-bit



Payload Specifications

Size	178 x 178 x 260 mm
Diameter	178 mm
Weight	8 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 μRAD jitter
Rotation Limit	360 deg continuous pan

Measurements displayed in mm



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