

# Ursa High Speed VIS



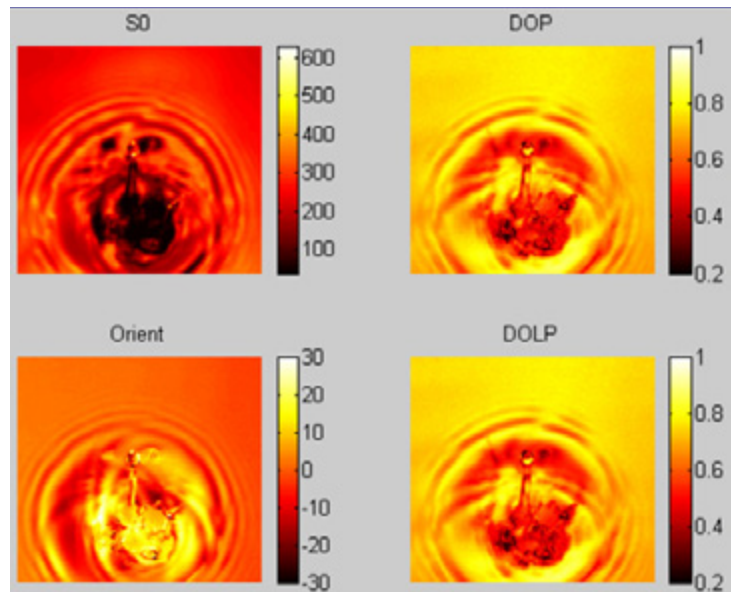
Operating Wavelength	430-630nm
FOV	4.8° x 3.6°
Objective Focal Length	75mm
Selectable F/#	2.8, 3.2, 4, 5.6, 8, 16, 32
Pixel Size	8.3µm square
Resolution (HxV)	782 x 582 pixels
FPA Size	6.49mm x 4.83mm
IFOV @ 8 Meters	1mm
Stokes Images Measured	S0, S1, S2
Max Frame Rate	60 frames/sec
Integration Time	1µsec-10msec
Size with Standard Lens (LxWxH)	14" x 5" x 10"
Weight with Standard Lens	15lbs
Working Distance	1m - infinity

## Summary

- Uses a special beam splitter block to direct light onto four different high speed CCD cameras to measure the linear polarization content of scenes at up to sixty frames per second
- All necessary states of polarization are captured simultaneously to eliminate any motion artifacts
- The system makes very efficient use of light so that short integration times down to 1ms are possible for stop action sensing
- A data acquisition system streams data synchronously to disk for post analysis

## Applications

- Determining surface geometries
- Detecting objects in clutter
- Measuring water wave slopes at high speed
- Skin diagnostics



Example of high speed polarimetry with a water droplet. Exposure of 1ms stops action.

# Polaris

Sensor Technologies, Inc.

200 Westside Square, Suite 320 | Huntsville, Alabama 35801  
256.562.0087 | [info@PolarisSensor.com](mailto:info@PolarisSensor.com) | [www.PolarisSensor.com](http://www.PolarisSensor.com)

© 2016 Polaris Sensor Technologies, Inc.