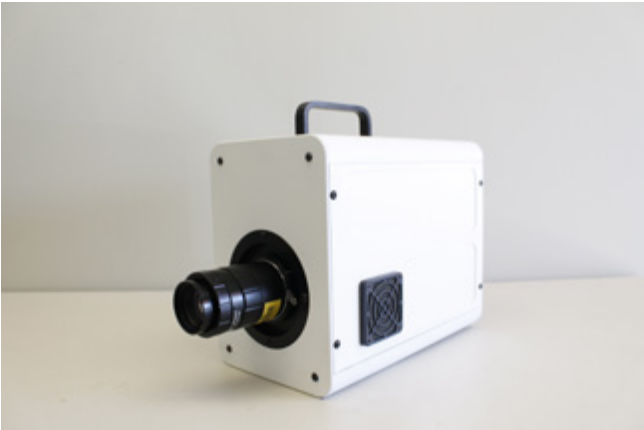


# Corvus SWIR



## Summary

- A scientific imaging instrument facilitating the investigation of polarization in the Short-Wave InfraRed (SWIR) band
- Architecture consists of a spinning linear polarizer, allowing the collection of the first three Stokes Vector elements--radiometric ( $S_0$ ), degree of horizontal polarization ( $S_1$ ), and degree of 45° polarization ( $S_2$ )--on a per-pixel basis
- Provides the Degree of Linear Polarization (DoLP) and Angle of Polarization (AoP)
- Ideally suited for the investigation of polarization phenomenology in scenes that are substantially static
- Powerful software puts you in control of the recording
- Has six different recording options including automatic collection over a long period of time (e.g., several diurnals) and manual control (start / stop)
- Once your data is collected, software further supports full data analysis to export the imagery for reports
- Spatial and temporal averaging of select pixels, pixels areas, or a line of pixels is also supported

## Applications

- Detection of camouflage netting
- Camouflage vehicle detection
- Waterborne vehicle detection
- Maritime navigation
- Phenomenology

Detector	InGaAs
Waveband	0.9 $\mu$ m to 1.7 $\mu$ m
Pixel Pitch	12.5 $\mu$ m
Resolution (HxV)	640 x 512
Standard Lens	50mm @ f/2.1
Field of View (Standard Lens)	9.1° x 7.3°
Camera Frame Rate	30Hz
Full Frame Operability	≥ 99%
NEDOLP @ f/2.1 (32 frame avg)	< 1% F.S. (3 $\sigma$ )
Input Voltage	120VAC
Size with Standard Lens (LxWxH)	6" x 9" x 14"
Weight with Standard Lens	12.5lbs
Data Interface	GigE
Steady Power @ 70°F	≤ 20W



SWIR DoLP (upper left) shows cars partially obscured and in heavy shadow that are not seen in the SWIR  $S_0$  image (upper right) or VIS  $S_0$  image (lower left).

