











OSCAR™ 300-L

Oil Spill Cleanup And Response

POWERED BY

Pyxis®

HIGH PERFORMANCE 6-INCH STABILIZED EO/POLARIZED LWIR LIQUID HYDROCARBON DETECTION SYSTEM FOR SMALL UNMANNED AIRCRAFT

-  **DETECTS LIQUID HYDROCARBONS**
Superior detection of emulsified oil, crude, refined oil, diesel & Jet-A; Insensitive to biologicals
-  **PYXIS POLARIZED INFRARED SENSOR**
Real-time polarized imagery
-  **INFRARED OPTICAL ZOOM**
10 to 105mm optical zoom lens
-  **THERMAL AND VISIBLE CAMERAS**
Day and day/night operations with a single payload
-  **ITAR FREE**
Non-controlled configurations available
-  **INSTANT REPORT GENERATION**
Integrated software for one click PDF report generation
-  **eTHERM IMAGING**
400% better detail and contrast than thermal
-  **EMBEDDED PROCESSING UNIT**
No additional software for oil detection needed
-  **ONBOARD GPS/ INS**
Accurate real-time aircraft and image location
-  **META DATA**
CSV metadata for use in mapping applications



OSCAR™ 300-L



SOFTWARE

FEATURES

- Onboard eTherm™ LWIR processing
- One click report generation software; includes eTherm image, EO Image, sensor location, altitude direction and angle
- CSV metadata for use in mapping applications
- Removable USB data storage
- Pyxis Vision Software included
- Field upgradeable software

REAL-TIME DETECTION

- Detects pooling hydrocarbons on water, around pipelines and beaches
 - Jet-A | Crude | Diesel
 - Emulsified Oil | Refined Oil
- Insensitive to kelp and algae
- Day and night airborne spill detection and monitoring
- Colorized eTherm image data and video; oil appears red
- Optimized for single pilot operation

MECHANICAL

SPECS

- Hybrid aluminum and composite construction
- Payload weight 4.3 lbs
- 14,500ft MSL | 0-90% Humidity 0-60C Temp
- Universal mount
- 3-axis closed-loop stabilization

ELECTRICAL

- Gimbal control over serial
- Mini HDMI video connector
- 16W Typical at 24V input, Maxium 110W Peak
- 24VDC regulated input (21.8V - 25.4V)
- GPS L1C/A, GLONASS L10F, BeiDou B1I
- GPS Connector: CAN2
- Multiple control/monitor interfaces
 - UART
 - Sbus
 - Micro USB
 - PWM



CAMERA CONFIGURATION

	Pyxis LWIR 640-G / Zoom Lens			16mm Visible Global Shutter
RES	640 x 512			1440 x 1080
FL	75mm	35mm	15mm	16mm
HFOV	8.3 Deg	17.7 Deg	39.9 Deg	17.6 Deg
VFOV	6.6 Deg	14.2 Deg	32.4 Deg	13.3 Deg