



**HurleyIR**

Since 1978



# Falcon Spectral II

**Falcon Spectral Series are gyro stabilized multi sensor gimbals designed to work on many platforms and applications.**

**The spectral diversity of its sensors, discrete controls, and automated detection system make it adaptable to many applications.**

**Some of those applications are as follows;**

- Day and night search and rescue
- Situational awareness
- Pursue and track
- Day and night surveillance
- Track and designate
- Monitor vast areas for motion
- Locate hot cars in parking areas
- Locate false chambers in large vehicles
- Muzzle fire detection
- Locate camouflaged people and sites
- Post event assessment
- Forest fire detection and monitoring
- Post fire hot ember detection
- Locate vegetation changes
- Locate grow houses
- Locate subsurface grow activity
- Detect ground disturbances
- Locate shallow graves
- Detect soil contamination
- Detect invisible gas leaks
- Locate sub surface sink holes
- Locate subsurface pipeline and steam system leaks
- Night animal tracking and counting
- Locate bug infestation
- Locate building moisture damage
- Locate building energy losses
- Locate power line defects
- Locate bridge sub surface concrete deterioration
- Track and chart thermal changes to waterways from power plant cooling systems
- Track water runoff thermal effects

**While these are some of the applications of the standard Falcon Spectral 2, there are many others. The Falcon Spectral 2 can spectrally adapt to the users applications.**

\*RTCA DO-160G



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# Specifications

*RTCA DO-160G Certified System*	
<b>High Definition Visual Camera</b>	
Effective Pixels (approx.)	2.1 Megapixels
FOV	64° - 2° (Optical) 2° - .3° (Digital)
Optical Zoom	30x
Digital Zoom	12x (360x with Optical)
Minimum Illumination	0.0008 lx
Electronic Iris	ON
Day & Night	Auto
Digital Noise Reduction	Auto
Auto Focus	ON
Aperture Compensation	Auto
Fog Cutter Mode	High, Medium, Low, Off
<b>Thermal Camera</b>	
Array	640x480 Uncooled
Spectral Range	LWIR
Optical Zoom	2° to 13° HFOV Continuous Zoom
Digital Zoom	2x kick
Sensor Frame Rate	9, 30, or 60Hz (Specify)
Focus	Auto Focus
Video Output	NTSC
Polarity	White Hot or Black Hot
Image Processing	Histogram or AGC
Detection*	5km (Man) 11km (Vehicle)
<b>Positioner</b>	
Pan/Tilt Speed	0.01 to 60°/sec
Tilt Angle	-90° to +60°
Pan Angle	360° Continuous
Position Accuracy	Within ± 0.10°
Position Reliability	±0.02°
Resolution	0.005°
Backlash	None
Stabilization	Gyro stabilization augmented with digital stabilization
<b>System Specifications</b>	
Operating Voltage	28VDC ±20%
Current Draw	5 amps Typical (11 AMPS Peak)
Operating Temperature	-49°F to +158°F
Weight	34 lbs.
<b>Options</b>	
Tracking	Target Lock and Track Multi Target Tracking
Application	Aerial pursuit and security, day and night search and rescue, situational awareness, pursue and track, day and night surveillance, etc.

\*All detection ranges do not include the curvature of the earth or atmospheric attenuation of signal