

A large, detailed image of a black military helicopter, the Falcon Spectral III, flying through a blue sky with white clouds. The helicopter is viewed from a low angle, looking up. The main rotor blades are blurred, suggesting motion. The tail rotor is also visible. The helicopter has various sensors and equipment mounted on its front and sides.

FALCON SPECTRAL III



+27 11 683 4365

www.instrumentsgroup.co.za



Falcon Spectral III Specifications

High Definition Visual Camera	
Effective Pixels (approx.)	4 Megapixels
FOV	5.5° - 50° x 3.1° - 37° (Horizontal x Vertical)
Optical Zoom	10x
Digital Zoom	16x
Minimum Illumination	Color: 2.0lx (F1.8, Gain High) B/W: 0.1lx (F1.8, Gain: High)
Electronic Iris	ON/OFF
Day & Night	Auto
Digital Noise Reduction	ON/OFF
Auto Focus	Auto
Aperture Compensation	ON/OFF
Thermal Camera	
Array	640x480 LWIR
Sensor Frame Rate	60Hz
FOV	14° x 10° (Horizontal x Vertical)
Zoom	Electronic Zoom 1x - 4x (0.25x step) and 4x (1x step)
F Stop	F/1.2
Focus	Manual Focus
Video Output	NTSC or PAL
Image Processing	Histogram or AGC
UV Camera	
System FOV	16°
Visual Channel Zoom	10x optical, 12x digital
Max Resolution per degree @ Max Optical Zoom	136
Sensitivity	240-280nm
Effective Visual & UV Pixels	640x480
UV Channel Zoom	0.5x, 1x, 2x (Full Screen UV Detection)
Solar Blind	Yes
Frame Integration Mode	Yes
Frame Averaging Mode	Yes
UV Slave to Visual	ON/OFF (ON upon start up)
Positioner	
Pan/Tilt Speed	0.01 to 60°/sec
Tilt Angle	-60° to +15°
Pan Angle	360° Continuous
Position Accuracy	Within ± 0.10°
Position Reliability	±0.02°
Resolution	0.005°
Backlash	None
Stabilization	Gyro Stabilized and Digital Stabilized
System Specifications	
	Weight: 35lbs or 16kgs
Operating Voltage	12 VDC or 24VDC ± 20%
Current Draw	4 amps Typical (11 AMPS Peak)
Operating Temperature	-40°F to +158°F

*Gimbal and optics operated through easy to use "Videogame Style" controller with interface box. DVR unit included for inspection recording with GPS tracking for precise post processing reliability and displayed over a daylight readable screen. System includes Falcon Spectral stabilized camera with interface control module, daylight readable monitor, DVR system with GPS overlay, controller, all cables, and ruggedized storage and transport cases.