

FLIR VUE™ PRO

Thermal Camera for sUAS

Take drone thermal imaging and data recording to the next level with Vue Pro



Designed for professional use, FLIR Vue Pro is more than a thermal camera, it is a thermal measurement instrument and data recorder that adds tremendous value to your sUAS operations and services. Still with the same industry-leading thermal imaging quality and affordability as the best-selling FLIR Vue, the Vue Pro adds full data recording of thermal video and 14-bit still imagery. When connected to compatible flight control systems, it will automatically insert full aircraft geo-location and flight data information into each captured image for the easy image stitching required for mapping, survey, and precision agriculture applications.



AFFORDABLE THERMAL IMAGING AND ON-BOARD DATA RECORDING

- Airborne thermal data recording starting as low as \$1,999
- Simple power-in/video-out interface over 10-pin mini-USB connector
- Image settings optimized for airborne operations

ON-BOARD RECORDING OF THERMAL IMAGERY AND FLIGHT DATA TO AN ON-BOARD MICROSD CARD

- Record real-time thermal videos in MOV format
- Still images save aircraft's flight information in each still image
- MAVLink integration with convenient over RS-232 connection

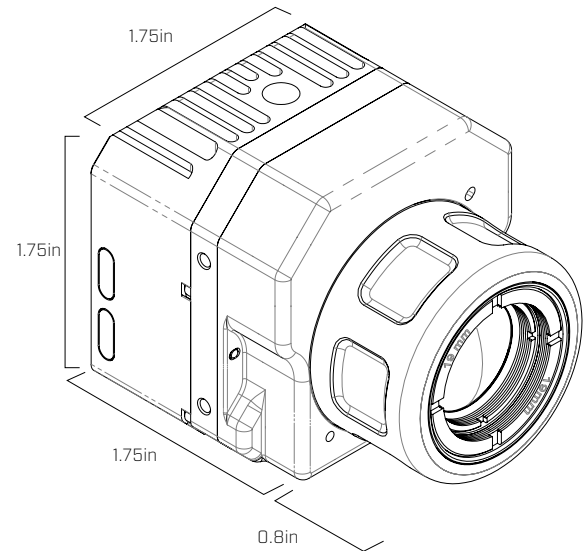
FLEXIBLE, POWERFUL CAMERA CONTROL AND CONFIGURATION OPTIONS

- Control two selectable camera functions with PWM inputs – imagery color palettes, recording start/stop, still image capture, or E-zoom setting
- Configure your camera's recording and control settings with our mobile app
- Field-upgradeability make sure you'll always have the latest features

Specifications

Overview		
Thermal Imager	Uncooled VOx Microbolometer	
Sensor Resolution	640 x 512	336x256
Lens Options (FOV for Full-Sensor Digital Output)	9 mm; 69° x 56° 13 mm; 45° x 37° 19 mm; 32° x 26°	6.8 mm; 45° x 35° 9 mm; 35° x 27° 13 mm; 25° x 19°
Lens Options* (FOV for NTSC Analog Output)	9 mm; 62° x 49° 13 mm; 45° x 35° 19 mm; 32° x 24°	6.8 mm; 44° x 33° 9 mm; 34° x 26° 13 mm; 24° x 18°
Spectral Band	7.5 - 13.5 μ m	
Full Frame Rates	30 Hz (NTSC); 25 Hz (PAL)	
Exportable Frame Rates	7.5 Hz (NTSC); 8.3 Hz (PAL)	
Physical Attributes		
Size	2.26" x 1.75" (including lens)	
Weight	3.25 - 4 oz (Configuration Dependent)	
Precision Mounting Holes	Two M2x0.4 on each of two sides & bottom One 1/4-20 threaded hole on top	
Image Processing & Display Controls		
Image Optimization for sUAS	Yes	
Digital Detail Enhancement	Yes - Adjustable in Mobile App	
Invertable Image?	Yes - Selectable in Mobile App	
Polarity Control (black hot/white hot) & Color Palettes	Yes - Selectable in Mobile App	
Interfacing		
Input Supply Voltage	4.8 - 6.0 VDC	
Power Dissipation, steady state (max. 2.5W during shutter event of approximately 0.5 seconds)	<1.2 W	~1.0 W
Environmental		
Operating Temperature Range	-20°C to +50°C	
Non-Operating Temperature Range	-55°C to +95°C	
Operational Altitude	+40,000 feet	
Optional Power & HDMI Video Module		
Input Power Range	5 VDC – 28 VDC	
Reverse Polarity Protection?	Yes	
Analog Video Output?	Yes	
HDMI Output	1280x720 @ 50hz, 60hz	

* Because the analog video output resolutions (640 x 480 and 320 x 240, respectively) are less than the full sensor resolution captured when saving digital stills and video, their resultant fields of view are slightly smaller as well. Both sets of values are shown here to allow operators the option of choosing the FOVs that most accurately reflect their pre-flight planning requirements.



Vue Pro with Optional Power & HDMI Video Module attached

Optional Power & HDMI Video Module

The Optional Power & HDMI Video Module makes the Vue Pro and Vue Pro R easier to integrate than ever. Its 10-pin mini-USB connector accepts a wider input power range and provides reverse polarity protection while still providing analog video output and access to the camera's on-board storage. The micro-HDMI connector outputs HDMI video for live digital video downlink systems like DJI Lightbridge and 3DR Solo. All this in a package that's only 11 mm thick and weighs 15 grams.

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