## **\$**FLIR



#### THERMAL CAMERA FOR DRONES

# FLIR Vue<sup>™</sup>Pro and FLIR Vue<sup>™</sup>Pro R

Designed for professional use, the FLIR Vue<sup>™</sup> Pro and FLIR Vue<sup>™</sup> Pro R are much more than thermal cameras, featuring thermal measurement and data recording capabilities that add tremendous value to sUAS operations and services. Simple integration into many of the world's leading airframes and powerful data collection tools enable informed decision making.

The FLIR Vue Pro R offers the power to gather accurate, non-contact temperature measurements from an aerial perspective. Each still image the Vue Pro R saves contains calibrated temperature data embedded in every pixel, adding more value to sUAS operations and services than ever.

Delivering industry-leading thermal imaging quality and affordability, the Vue Pro and Vue Pro R add full data recording of thermal video and 14-bit still imagery, making them perfect for airborne solar panel inspection, building inspection, livestock management, natural resource management and protection, public safety, and search and rescue.

www.flir.com/VueProR



#### AFFORDABLE THERMAL IMAGING AND ON-BOARD DATA RECORDING

Record digital video and still imagery to a removable micro-SD card, eliminating data transmission loss.

- Simple power-in/video-out interface over 10-pin mini-USB connector
- Image settings optimized for airborne operations
- Record real-time thermal videos in MOV format
- Aircraft flight information is saved in each still image



#### MAVLINK INTEGRATION & PWM CONTROLS

In addition to MAVLink compatibility for image geotagging, the accessory port allows remote in-flight camera function control.

- Multiple recording options including flight data in each image
- Mobile app allows for PWM configurations in the field
- MAVLink integration with convenient RS-232 connection



#### FLEXIBLE, POWERFUL CAMERA CONTROL AND CONFIGURATION OPTIONS

Easy configuration with the FLIR UAS app lets pilots set color palettes and image optimization features.

- Control selectable camera functions with PWM inputs – imagery controls, recording start/stop, and still image capture
- Vue Pro R saves Radiometric JPEGs with temperature data embedded in every pixel
- Vue Pro R saves still images as Radiometric JPEGs, or 14-bit TIFF formats

#### SPECIFICATIONS

Thermal Imager	FLIR Vue Pro and FLIR Vue Pro R	
Sensor Technology	Uncooled VOx Microbolometer	
Array Format	640×512	336×256
Lens Options (FOV for Full-Sensor Digital Output)	9 mm; 69° × 56° 13 mm; 45° × 37° 19 mm; 32° × 26°	9 mm; 35° × 27° 13 mm; 25° × 19°
Lens Options* (FOV for NTSC Analog Output)	9 mm; 62° × 49° 13 mm; 45° × 35° 19 mm; 32° × 24°	9 mm; 34° × 26° 13 mm; 24° × 18°
Spectral Band	7.5 – 13.5 μm	
Full Frame Rates	30 Hz (NTSC); 25 Hz (PAL)	
Exportable Frame Rates	7.5 Hz (NTSC); 8.3 Hz (PAL)	
Radiometric Data	Available on the FLIR Vue Pro R	
Physical Attributes		
Size	57.4 × 44.45 × 44.45 mm (2.26 × 1.75 × 1.75 in) including lens	
Weight	92 – 113.4 g (3.25 – 4 oz) configuration dependant	
Precision Mounting Holes	Two M2×0.4 on two sides & bottom One 1/4-20 threaded hole on top	
Image Processing & Display Controls		
Image Optimization for sUAS	Yes	
Scene Presets & Image Processing	Adjustable in app	
Invertable Image	Adjustable in app	
Color Palettes	Adjustable in app and via PWM	
Zoom	Adjustable in app and via PWM	
Interfacing		
Input Voltage	4.8-6.0 VDC	
Power Dissipation (Peak)	2.1 W (3.9 W)	
Optional Power & HDMI Video Module		
Input Power Range	5 VDC – 28 VDC	
Reverse Polarity Protection	Yes	
Analog Video Output	Yes	
HDMI Output	1280 × 720 @ 50 Hz, 60 Hz	
Environmental		
Operating Temperature Range	-20°C to 50°C (-4°F to 122°F)	
Non-Operating Temperature Range	-55°C to 95°C (-67°F to 203°F)	
Operational Altitude	12,192 m (40,000 ft)	

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

Specifications are subject to change without notice. For the most up-to-date specs, go to www.flir.com

#### CORPORATE HEADQUARTERS

FLIR Systems, Inc. 27700 SW Parkway Ave. Wilsonville, OR 97070

SANTA BARBARA FLIR Systems, Inc. 6769 Hollister Ave. Goleta, CA 93117 PH: +1 805.964.9797 EUROPE FLIR Systems, Inc. Luxemburgstraat 2 2321 Meer Belgium

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**OPTIONAL POWER & HDMI VIDEO MODULE** 

3DR Solo. All this in a package that's only 11 mm thick and weighs 15 g.

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



Vue Pro R with Optional Power/HDMI Video Module attached.

www.flir.com NASDAQ: FLIR

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