



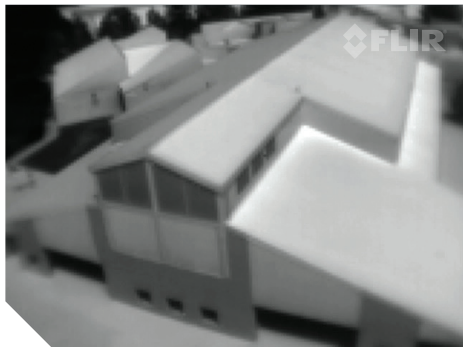
FLIR Duo™

THERMAL AND VISIBLE LIGHT IMAGING IN AN ACTION CAMERA PACKAGE

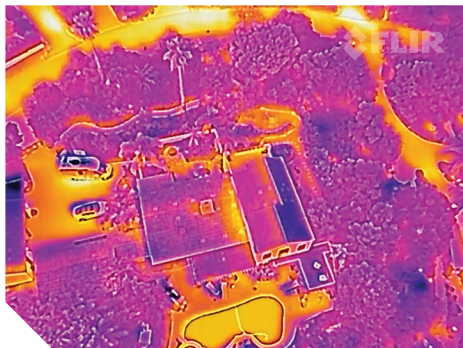
The new FLIR Duo is the world's first dual sensor thermal and visible light imager designed for use on personal drones. The same size and shape as the most popular action cameras, Duo offers all of the same features – like on-board recording and real-time remote control of camera functions over PWM – as the Vue Pro, but at a fraction of the cost.

Featuring the cutting edge Lepton thermal sensor, Duo pairs 160x120 thermal resolution with a 2-megapixel color camera. Switch between them in flight, view a picture-in-picture mode, or choose FLIR's exclusive MSX® to enhance thermal images with visible light detail for extra perspective, and record everything to a microSD card.

Duo has two live video output options: analog video over the 10-pin mini-USB connector, or digital video over micro-HDMI. It also has a wide 5-26 VDC input power range with reverse polarity protection for easy integration.



Aerial Thermal Roof Inspection



MSX adds extra detail to thermal images.

THERMAL AND VISIBLE-LIGHT IMAGING & RECORDING IN A POPULAR ACTION CAMERA FORM FACTOR

- Airborne dual sensor thermal and video imaging and recording
- Simple power-in/video-out interface over 10-pin mini-USB connector
- Switch from thermal to visible image outputs or to PIP or MSX modes in real time

RECORDING OF THERMAL & VISIBLE IMAGERY TO A CONVENIENT ON-BOARD MICROSD CARD

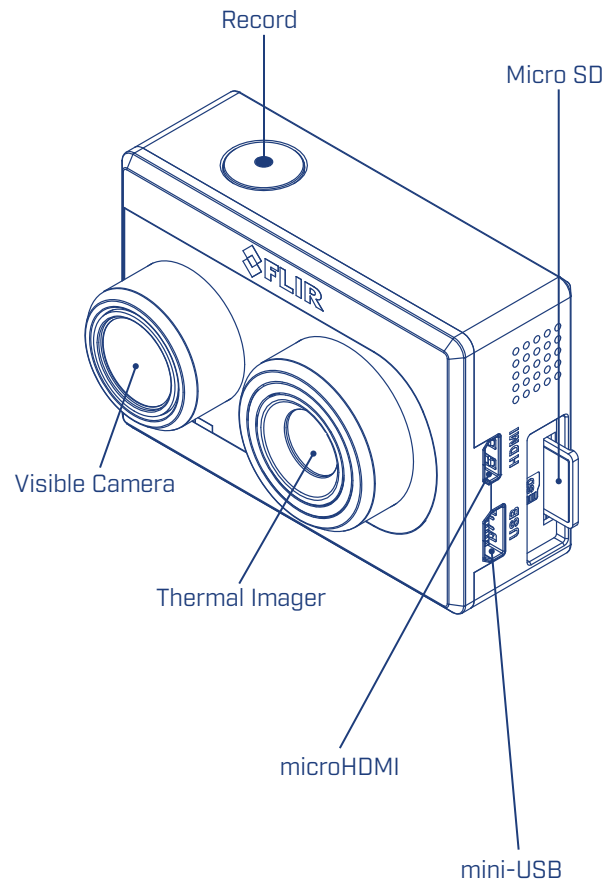
- Record real-time thermal videos in MOV format
- View MSX image blending live
- Integration with MAVLink-compatible flight controllers

FLEXIBLE, POWERFUL CAMERA CONTROL AND CONFIGURATION OPTIONS

- Control camera functions with PWM inputs – imagery color palettes, recording start/stop, or video streaming switch (thermal, visible, MSX, PIP)
- Configure your camera's recording and control settings over Bluetooth with our mobile app
- Field-upgradeability makes sure you'll always have the latest features

Specifications

Overview		FLIR Duo
Thermal Imager	Uncooled VOx Microbolometer	
Sensor Resolution	160 × 120	
Lens Options	57° × 44°	
Spectral Band	7.5 – 13.5 μm	
Thermal Frame Rates	7.5 Hz (NTSC); 8.3 Hz (PAL)	
Visible Camera Resolution	1920 × 1080	
Visible Camera FOV	90°	
Physical Attributes		
Size	41 × 59 × 30 mm	
Weight	84 grams	
Image Processing & Display Controls		
Image Optimization for sUAS?	Yes	
Multiple Color Palettes?	Yes – Adjustable in App and via PWM	
MSX Enhancement?	Yes	
Picture-in-Picture?	Yes	
Interfacing		
Mini-USB Connector	Power in, Analog video out, PWM connections, MAVLink control	
Input Voltage	5.0 - 26.0 VDC	
Power Dissipation (Peak)	2.2 W (3.3 W)	
Remote Control	Two PWM Controls (assigned in App)	
MAVLink interface?	Yes	
Digital Video Output	Micro-HDMI; HDMI video at 1080p	
Environmental		
Operating Temperature Range	0°C to +50°C	
Storage Temperature Range	-20°C to +60°C	
Operational Altitude	+12,000 feet	



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