

# Product Datasheet

# MUVE™ C360

## Integrated Multi-Gas Detector for Unmanned Aerial System

The FLIR MUVE™ C360 is a multi-gas detector completely integrated with an unmanned aerial system (UAS) to provide real-time continuous monitoring of chemical hazards while on the move. The sensor block boasts 8-channels, which includes a photoionisation detector (PID), Lower Explosive Limit (LEL) detector, and five other electrochemical sensors. The MUVE™ C360 sensor block quickly latches to a proprietary integration dock mounted to the UAS. The FLIR calibration station features the same dock, so the operator can easily connect for routine sensor verification. Sensor readouts are prioritised based on alarm conditions and are displayed realtime through the pilot's user interface. The MUVE™ C360 is a time-saving, game-changer for emergency responders, industrial safety officers, and environmental monitoring experts



### Access the scene from a safe distance

Before putting the health and safety of your team at risk, fly the C360 into the scene to gather initial assessment of hazards.

- 8-channel sensor delivers broad hazard coverage.
- Analyse air quality surrounding active scenes prior to entry.
- Select proper PPE before entering scene.
- Locate leak source and track incident progression.

### Significantly reduce the time to action

Deploy the C360 on scene in the time it takes the average responder to suit up.

- Quick deployment allows for rapid threat assessment even in areas where contamination would be difficult to access normally.
- Cover difficult terrain from the air to assess hazards.
- Quickly draw a perimeter to assess and map hazards.
- Preset alarm thresholds to make quicker decisions on-scene.
- Understand the flow of hazardous vapours at the source, but also in the air.

### Fully integrated situational awareness

Get a comprehensive overview of an active scene including visuals and chemical identification.

- FLIR Vuelink App provides plug-and-play control of the C360, flight operations, and other on-board sensors.
- Analyse, log, and access complex data in an easy-to-understand visual overlay.
- Install with click-in simplicity via onboard integration dock.

# Specifications

## Sensor Block Technology

<b>Sensors</b>	O, Cl <sub>2</sub> , O <sub>2</sub> , NO <sub>2</sub> , H <sub>2</sub> S, SO <sub>2</sub> , LEL
<b>PID</b>	OC 10.6 eV (ppm)
<b>FLIR Calibration Station</b>	Proprietary automatic calibration design, includes four (4) gas regulators, tubing, and power adaptor

## Sampling and Analysis

<b>Sample Introduction</b>	Actively pumped via integrated snorkel
<b>Sampling Rate</b>	300 ml/min minimum
<b>Sampling and Analysis</b>	Real-time detection

## System Interface

<b>Display and Alerts</b>	LIR VueLink™ application integrated via tablet connected to the UAS remote controller
<b>Communication</b>	Remote controller via USB-A accessory (tablet); UAS power port and serial (C360)
<b>Wireless Range</b>	Determined by the UAS range
<b>Data Storage</b>	Sensor data and flight information logged on tablet
<b>Training Requirements</b>	<30 mins for operator; 4 hours for advanced user

## Power

<b>Input Voltage</b>	24V DJI Matrice 210; 12V FLIR Calibration Station
<b>Battery Specification</b>	Powered by the UAS
<b>Cold Start Time</b>	90 seconds from cold start

## Environmental

<b>Operating Temperature</b>	-4 to 122 °F (-20 to 50 °C)
<b>Operating Humidity</b>	10 to 93%, non-condensing
<b>Storage Temperature</b>	-22 to 158 °F (-30 to 70 °C)
<b>Protection</b>	IP43-rated

## Physical Features

<b>Dimensions (L x W x H)</b>	16.51 x 5.84 x 5.08 cm – C360 only
<b>Total Payload Weight</b>	680.39 g – C360 with dock and snorkel
<b>Compatibility</b>	Currently compatible with DJI Matrice 210, V1 and V2, UAS
<b>Integration Dock</b>	Proprietary quick-connect mount for UAS and FLIR Calibration Station

Specifications are subject to change without notice.  
For the most up-to-date specifications, please visit [www.flir.com](http://www.flir.com)

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