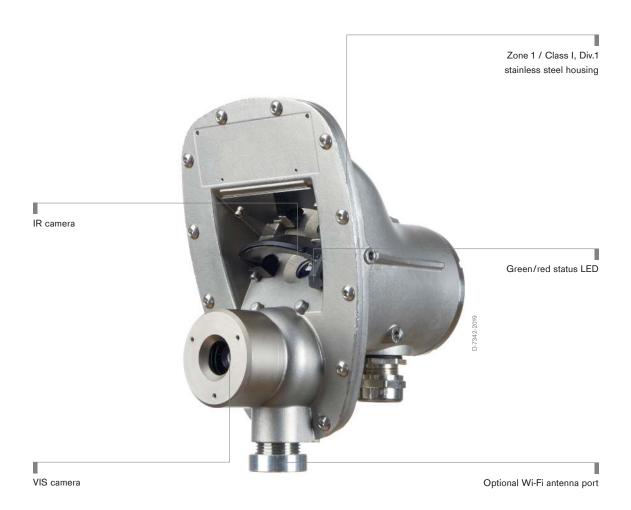


# MetCam Gas Camera Optical Area Monitoring

The MetCam is an explosion-proof gas camera that continuously monitors large areas for hazardous methane leaks and fugitive emissions. The device automatically quantifies the source and intensity of the leak using advanced algorithms and transmits alarms via analog 4–20mA/HART® or RS485 Modbus. Visualization is via Ethernet or Wi-Fi.



### **Benefits**

### Visualized gas leaks

In the oil and gas industry, there are often spacious or convoluted plant areas that are difficult to reach or whose gas pipelines have many connections. Here, typical gas detection systems reach their limits. However, even under these conditions, an optical gas detection camera makes gas leaks visible in terms of their source and intensity. This makes the MetCam an ideal complement to your gas detection system for a faster and more accurate assessment of a potential hazard.

### Increased safety and efficiency

The MetCam automatically monitors your facility around the clock. Unlike point detectors, the gas source need not be in the immediate proximity of the gas camera. The source just needs to be in the field of view of the camera, which makes detection independent of wind or similar influences. The MetCam detects and alerts you to gas leaks at an early stage, giving you time to react – which increases safety and efficiency at your facility.

### Simple event interpretation and multipurpose use

The gas camera visualizes the gas cloud as a colored overlay on the black-and-white video image and independently quantifies the concentration. As a result, you can interpret the event from a safe distance, such as, from your control room. You can also use the MetCam to measure emissions or as a surveillance camera with a color image.

### Fewer false alarms, very low maintenance

The camera independently recognizes if the optics are dirty or covered, and alerts you accordingly. This reduces false alarms and ensures that your system is ready for use. In order to adapt to changing weather conditions, the MetCam regularly performs a self-calibration. Special maintenance or calibration is not necessary.

### Various communication options

The MetCam offers various communication interfaces and supports corresponding protocols for data and video transmission. The analog, 4–20 mA current interface, in conjunction with HART®, can be used to transmit the alarms and device status. Video transmission takes place via the Ethernet interface using LAN. Two different operating modes are simultaneously available. One mode is the transmission of the black-and-white video with a color overlay of the detected gas cloud in the event of a leak. The second mode is a color video for area monitoring without showing the gas concentration.

### **Automatic documentation**

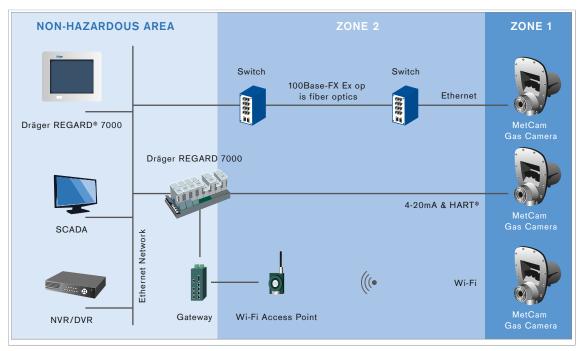
All events and measured data are stored automatically, allowing you to evaluate them later. You can also easily create emission logs.

### **Benefits**

### Standalone operation

Advanced built-in intelligence allows the MetCam to automatically detect methane gas leaks without false alarms. This eliminates the need to constantly monitor the video feed manually or with external software for analyzing leaks.

## Network Infrastructure with the MetCam Gas Camera



Installed in the Ex zone, the MetCam communicates via Ethernet, 4-20 mA and HART® or wirelessly with the control unit in the non-hazardous area.

### Accessories



### **Functional Test Sheet**

This handheld test target is all that is needed to verify the functionality of the MetCam, which is recommended twice a year.



### **Weathershield and Tilt Mount**

The weathershield protects the MetCam from the sun and the elements. The MetCam tilt mount can be attached to a horizontal surface (from below or above), to a vertical surface, or to a 2" post.

### Related Products



### Dräger REGARD® 7000

The Dräger REGARD® 7000 is a modular and highly expandable control system for monitoring various gases and vapors. Ideal for gas warning systems with various levels of complexity and numbers of transmitters, the Dräger REGARD® 7000 delivers exceptionally reliability and efficiency. An additional benefit is the controller's backward compatibility with the REGARD®.

### Related Products



### Dräger Polytron® 8700 IR

The Dräger Polytron® 8700 IR is an advanced explosion proof transmitter for the detection of hydrocarbon gases in the lower explosion limit (LEL) and ppm. It uses a high performance infrared Dräger PIR 7000 sensor, which will quickly detect most common hydrocarbon gases. Besides a 3 wire 4 to 20 mA analog output with relays, it also offers HART®, Modbus and Fieldbus making it compatible with most control systems.



### Dräger Flame 5000

In today's industrial workplaces, flame detection is essential for protecting both people and facilities. The Dräger Flame 5000 is an explosion-proof flame detector based on advanced color imaging technology. Each detector operates as a standalone unit and incorporates an integrated closed circuit television (CCTV) system, digital signal processing, and software algorithms to process live video images and interpret the characteristics of a flame.



### Dräger Polytron® 8900 UGLD

The Dräger Polytron® 8900 UGLD transmitter is an early warning area monitor for detecting high-pressure gas leaks in outdoor industrial process environments. Thanks to an ultrasonic acoustic sensor, it responds earlier than conventional gas detectors because it notices the sound of leaking gas instead of measuring the concentration of accumulated gas clouds. As gas escapes, leaks are immediately detected in the surrounding area, regardless of the wind direction.



### Dräger Pulsar 7000 Series

The Dräger Pulsar 7000 Series are stationary open path gas detectors. They detect explosive hydrocarbons in gases. The robust design and the extremely rapid response of the sensor make the Dräger Pulsar 7000 Series a dependable solution for your requirements in the oil and gas industry, as well as the chemical industry.

# **Technical Data**

### Camera characteristics

Camera characteristics	
Measuring gas	Methane
Туре	Explosion proof / flameproof (Ex d) optical gas imaging camera
	with transmitter
Response time	< 10 seconds
Range	10 to 50 m
Field of view	Horizontal 68°; vertical 23°
Lower detection threshold	> 60 g/h
Self-calibration  Communication/Protocol	Every 3 to 5 minutes
	Interval depending on the change in ambient temperature
	Giga Ethernet
	Modbus half-duplex
	ONVIF Protocol – Profile S
	HART® Protocol
Electrical data	
User interface	Green/red status LED
	Webserver over Ethernet or Wi-Fi
Output signals	4-20 mA / 16 mA / 20 mA (stepped), HART®
RS 485	RS-485 Modbus compatible interface
LAN	Giga bit Ethernet – Optional Wi-Fi
Supply voltage	24 VDC (16–32 VDC)
Power consumption	Max. 22 W
Environmental conditions	
Temperature range	Operation: -13 to +104 °F (-25 to +40 °C)
	Optional: -40 to +140 °F (-40 to +60 °C)
Housing	
Material	Stainless steel 316
Protection class	IP66, NEMA 4X
Cable gland	1 M25 or 3/4" NPT
Weight	< 9.9 lb (< 4.5 kg)
Dimensions	6.1 x 9.3 x 7.2 in (156 × 236 × 183 mm)
Approvals	
ATEX/ IECEx	Ex II 2G
	Ex db ia IIB+H2 T5 Gb
	Ex db ia mb IIB+H2 T5 Gb (MetCam Wifi)
	-40 °C ≤ Tamb ≤ 60 °C
US & Canada (QPS File LR1524)	Class I, Division 1, Groups B, C, D, T6
	Class I, Zone 1 AEx db ia IIB+H2 T5 Gb
	-40 °C ≤ Tamb ≤ 60 °C
	Class I, Division 1, Groups B,C,D T6
	Ex db ia mb IIB+H2 T5 Gb (MetCam Wifi)
	Class I, Zone 1, AEx db ia mb IIB+H2 T5 Gb (MetCam Wifi)
Applicable Standards	CSA C22.2 No. 60079-0:2015, No. 60079-1: 2016, No.
	60079-11: 2014, No. 60079-18: 2018 No. 30-1986 (R2016) No. 60529:16
	UL 60079-0:2013, UL 60079-1:2015, UL 60079-11:2013,
	UL 60079-18: 2015, UL 1203 5th Ed. (2015), IEC/ANSI
	60529-2004

# Ordering Information

MetCam Camera (3/4NPT)	37 03 416
MetCam Camera (3/4NPT, Temp)	37 03 418
MetCam Camera (3/4NPT, Temp, Wi-Fi)	37 03 420
MetCam Camera (M25)	37 03 415
MetCam Camera (M25, Temp)	37 03 417
MetCam Camera (M25, Temp, Wi-Fi)	37 03 419
Pan Tilt Mounting Set	37 03 421
Weather Shield	37 03 422
Functional Test Sheet	37 03 423

Notes

# 91 07 419 | 21.03-3 | HQ | PP | Subject to modifications | © 2021 Drägerwerk AG & Co. KGaA

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