

# GET OVER YOUR GAS DETECTION PROBLEMS.



# mdTector, from Microdrones, is a lineup of professional aerial inspection solutions.

mdTector1000CH4 LR, is a fully integrated aerial methane inspection package. It's purpose-built for professionals who are responsible for inspecting methane gas infrastructure.

mdTector1000CH4 LR consists of a Pergam gas sensor, mounted and integrated perfectly with a Microdrones md4-1000 UAV. It has an onboard HD video link. That means that you can see in real time what you are detecting with the laser sensor.



A perfectly integrated Pergam Laser Methane Falcon sensor for detecting Methane (CH4) and methane-containing gases, 1 – 50,000 ppm × m.



# PLATFORM



# md4-1000

Robust, powerful, stable and dependable. Build your business on this versatile platform.





# Charger, Flight Battery & Carrying Case

One md4-1000 flight battery and charger for maximum flight endurance and a field tough carrying case.

# COMMUNICATIONS



Proven, professional controls and telemetry keep you in control when you need it most.





# Digital Data Link

Conveniently connect your Microdrones UAV to your digital devices.

# It goes where people shouldn't.

Whether your gas infrastructure is in a hard to reach riverbed or near a steep cliff... the tough, carbon-fiber built drone will easily navigate terrain that would be difficult, dirty or dangerous by traditional foot crews. Microdrones is known for its field-proven aircraft platform. It's sturdy, stable, resistant to wind and weather, as well as dust and dampness.

The mdTector1000CH4 LR is versatile and can be used for:

- Natural gas line surveys
- Tank inspections
- Gas well testing
- Landfill emission monitoring
- Plant safety



# Integrated Methane Gas Sensor & FPV Camera with Video Link

Pergam LMm Gen 2 for Methane (CH<sub>4</sub>) and methane-containing gases, 1 – 50,000 ppm×m

SOFTWARE



# mdTector Viewer App

Visualize methane detection levels, post flight on a map, via an intuitive, easy to use Microdrones Android app.



# mdCockpit Tablet Software

Simple swipes of the finger help you plan your survey area and monitor progress in flight on your Android tablet.

# **SOLUTION COMPONENTS**

**Platform** 

md4-1000

**Payload** 

Sensor: Pergam Laser Methane Falcon

Software

mdCockpit

mdTector Viewer App

# **TECHNICAL SPECIFICATIONS**

Solution Take off Weight (TOW)

5520 g

**System Operational Temperature** 

-10 °C to 50 °C

# PRODUCT PERFORMANCE

Target Gas	Methane (CH <sub>4</sub> ) and methane-containing gases (natural gas and similar)
Detection Limits	1 – 50,000 ppm×m
Detection Speed	0.1 seconds <sup>(1)</sup>
Detection Distance	1.5 ft. (0.5 m) – 328 ft. (100 m)
Laser Safety Class	Guide light (Green laser light): Class 3R, Measurement light (infrared laser light): Class 1
Dimensions	120 (W) × 120 (D) × 140 (H) mm
Features	Live view telemetry, Live view video feedback

 $<sup>^{\</sup>scriptsize{(1)}}$  The mdTector1000CH4 solution averages 10 data in order to record 1 value each second.

Please take note that the lower distance values might represent safety issues for the UAV in terms of altitude above ground level.



# APPROXIMATE FLIGHT TIME

Systems are delivered with a preflight planning tool that will provide the pilot with the low battery level recommended for safe landing.

# **2 BLADE FLIGHT TIME**

# (OPTIONAL) 3 BLADE FLIGHT TIME

