Intelligent Laser Methane Telemetry System-FORNAX LM10

Intelligent Laser Methane Telemetry System FORNAX LM10 is a multi-functional laser methane telemetry system equipped with a high-sensitivity laser methane detection module, a 10x optical zoom lens, and a 1,200-meter laser rangefinder Controlled by the drone remote control APP, it displays methane-related data in real time and records the over-standard alarm message. The laser detection module can detect methane leakage within an altitude of 200 meters by spiral scanning and can penetrate up to 5 layers of glass to detect the room. The power supply is installed at the pan-tilt interface, which is efficient and convenient. The high-altitude detection can flexibly detect natural gas leaks in areas that are not accessible such as top pipelines of urban buildings, field pipelines, bridge-crossing pipelines, and storage tanks. LM10 is equipped with a cloud platform as standard configuration, which can return scene images and detection data. If a leak is found by intelligent data analysis, it will give alarms immediately, record the inspection track and alarm events, and automatically generate an inspection report.

200-meter Telemetry distance

Sensitivity of 5 ppm*mt

Intelligent analysis of cloud data

App control

5-layer glass penetration

5MP 10x optical zoom lens

1,200-meter ranging

Swing detection

Product Parameters

Device host

Name	Intelligent laser methane telemetry system
Model	LM10
Electrical interface	DJI SkyPort V2
Dimensions	128mm*158mm*169mm
Weight	840g
Rated power	27.2W
Rated voltage	13.6V
Current	2A
Power supply mode	power supply by drone
Control distance	consistent with drone link
Control method	drone remote control、cloud-based control
Remote monitoring	support
Presentation	numerical, 2D planar, 3D histograms
Report export	support
Inspection method	manual and automatic
Data traceability	support
Sensitivity	5ppm*m

Concentration range	0-99,999 ppm*m
Sampling frequency	200Khz
Measurement accuracy	±10%(1,000–40,000 ppm*m)
Telemetry distance	200m
Infrared detection laser	1,650 nm
Green indicating laser	515nm
Glass penetration	5 layers
Lens pixels	5 megapixels
Resolution	1920x1080
Frame rate	30 fps
Focal length	5–50 mm, 10x optical zoom
Aperture	F2±10%
Perspective	horizontal: 50.85–7.67, vertical: 27.78–4.36
Range	5–1,200 m
Ranging accuracy	±1m
Laser wavelength	905nm
Material	aluminum alloy
Heat Dissipation	active cooling
Installation	quick-release
IP Grade	IP55
Support model	DJI Matrice 350 RTK, and Matrice 300 RTK
Operating temperature	–25°C to 55°C
Storage temperature	–30°C to 60°C

Product Characteristics

Professional methane detection sensor

Professional sensors have the characteristics of widemeasure - ment range, high precision, and long distance, helping field personnel to operate efffciently.

5MP high resolution lens

The device itself is equipped with a 5MP high-resolution lens, and there is no need to mount other lenses for operations , which maximizes the working hours while meeting the needs of on-site operations.

Sensitive response and 5-layer glass penetration

It has a high sensitivity of 5 ppm*m, with 5-layer glass penetration, to solve the industry problem of indoor detection.

1,200-m rangefinder

The 1,200-m laser ranging module accurately measures and records the alarm point.

Real-time display of alarm records on APP data

The device is controlled through the remote controller APP with the measurement data dynamically displayed and the alarm messages intelligently recorded.

Cloud platform data return for analysis

The intelligent inspection cloud platform can report on-site operation images and detection data in real time and generate a threedimensional distribution map of methane detection in real time, providing visual decision-making information.

Power supply by quickrelease drone

Through the rapid installation of the cloud platform interface, the drone can

provide real-time power supply for the equipment to meet the continuous operation on site.