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PTZ Laser Methane Remote Detector

EOC-GDM-TDLAS-CH4-370

Features

- Using tunable diode laser absorption spectroscopy technology, remotely measure leaking gas and non-contact measurement;
- Long-distance active monitoring, the maximum monitoring distance is 200 meters;
- High sensitivity, fast response speed, can provide early warning;
- It has unique selectivity for methane and is not affected by other gases, water vapor, and dust;
- Adopting an integrated structural design, integrating laser methane telemeter, high-definition camera, and all-round variable speed pan-tilt to meet real-time monitoring day and night;
- Using standard communication protocols, it can easily communicate with the host computer, control system and auxiliary equipment;
- Can be horizontal 360° and pitch ±90° rotation, rotation speed 0.1°~60°/s, to achieve no-dead-angle monitoring;
- Explosion-proof design, wide voltage operating range and surge protection function;
- Powerful system functions, can generate inspection reports to record concentration and alarm information, etc.;
- High-precision camera, support 3D positioning, can select the target by mouse frame to achieve rapid positioning and capture of the target;
- Protection level reaches IP68;
- With wiper and sunshade;
- Support remote system upgrade.

Description

The EOC-GDM-TDLAS-CH4-370 PTZ laser methane telemeter rapidly and reliably monitors methane gas leaks, utilizing advanced laser measurement principles for comprehensive 360-degree monitoring in complex environments. It features automatic scanning, automatic cruising, and power-off memory for enhanced operational efficiency.

Ideal for hazardous environments, the telemeter's single-mode laser radiation wavelength avoids cross-interference, ensuring accurate detection and eliminating false alarms with laser spectrum detection technology. This simplifies safety management, making it perfect for industries like petroleum, petrochemical, natural gas, chemical, mining, and power plants requiring unattended real-time monitoring.

Application

- Refineries in the petroleum and petrochemical industries;
- Natural gas pipelines, transmission stations, and gas filling stations;
- Overhead pipelines, risers, or pipelines distributed in narrow spaces;
- Chemical plants, metallurgical industries, power industries, and other places where gas leaks may occur.

1. Parameter

Detection principle	Tunable Diode Laser Absorption Spectroscopy (TDLAS)
Detection object	CH4
Detection range	50-100000ppm.m
Sensitivity	5ppm.m
Detection error	≤±5%F.S
Measurement distance	≤150m (200m can be customized)
Response time	(T90)≤0. 1s
Laser safety level	Class I laser detection
	Indicated laser of Class 3R
Supply voltage	AC220V/DC24V
Communication mode	RS485
Operating temperature	-40℃~ + 60℃
Operating humidity	< 98%RH, no condensation
Enclosure protection level	IP68
Explosion-proof level	Exd IIC T6 Gb/Ex tD A21 T80℃
Material	SUS304/SUS316
Dimensions	500mm*320mm*400mm
Weight	30Kg

2. Accessories list

NO.	Items	Quantity	Optional/Standard
1	Equipment	1 set	Standard
2	Sunshade	2 sets	Standard
3	M8×40 screws (including spring washers, flat washers, nuts)	6 sets	Standard
4	M3, M8 hexagon wrenches	1 each	Standard
5	Pipe clamps	1 each	Standard
6	Product certificate, user guide, explosion-proof certificate	1 each	Standard
7	Explosion-proof flexible pipe	1 each	Standard
8	Wall-mounted bracket	1 set	Standard