

# EnergoM-3006

# **Fixed Freon Gas Detector**

Brief Introduction



The fixed infrared Freon refrigerant gas detector is suitable for continuous online detection of Freon refrigerant gas concentration in various industrial environments and special environments. The instrument adopts high-precision infrared NDIR gas sensor and microcontroller technology, with stable signal, high precision, good repeatability, and explosion-proof wiring mode suitable for various hazardous places. The instrument is compatible with various alarm controllers, PLC, DCS and other control systems, and can achieve functions such as remote monitoring, remote alarm, and computer data storage.

#### Product features

- Modular structure, convenient maintenance, simple wiring installation
- Smart sensor platform, but plug and play, without calibration
- Fast response, high measurement accuracy and the running stability of the testing instrument
- Rich sensor range selection, can meet the requirements of customers
- Three kind of signal output, RS485 and 4~20mA (three wire) digital / analog signal and two relay output at the same time.
- It can be set high and low alarm point, two level sound and light alarm.
- Two relay to control peripheral devices (such as the action of machine and sound and light alarm).
- Round casting stainless steel housing is suitable for offshore platforms, as well as high temperature, high humidity and other harsh environments.

- Good sealing, anti-corrosion, explosion-proof and anti EMI, RFI function.
- Supporting use of our company 's series alarm host.
- Adopting explosion-proof and intrinsically safe design
- The flame-proof and safety design, EXD II CT6 Gb, IP65

### Parameters

	Freon Refrigerant Gas ( R125,R134a,R143a,R404a,R410a,				
Measured gas	R407f,R449a,R417A,R448a,R452b,R407a,R507,R1234ze, R1234yf,R227ea,R32,R22,R113)				
Sensor Type	NDIR				
Sampling way	Diffusion, pipeline				
Range	0-1000ppm, 0-2000ppm etc				
Resolution	0.1PPM/1PPM				
Electrical interface(thread)	M20*1.5, or G3/4、G1/2、1/2NPT、3/4NPT				
Response time	T90<30s	Display	Yes		
Power	12~24VDC	Smart platform	Optional		
Repeat	≤±2%	The linear error	≤±1%		
Zero drift	≤±1% (F.S/Y)	Accuracy	≤± 3 % F.S.		
Signal output	RS485、4-20mA、Two	Pressure	860-1060hpa		
	sets of relay output	range	000-100011pa		
Operating temperature	-40℃~70℃	The power consumption	<2.0W		
Explosion-proof grade	Exd II CT6 Gb	Work humidity	0-95%RH(no condensing)		
Sound and light alarm	OPTIONAL	Protection grade	IP65		
Size	195mm*178mm*90m	Capacity	0.5A/125VAC or		
	m (MAX)		1A/30VDC		
Life for sensor	See date of sensor	Weight	1.2kg(Cast aluminum)		
Execution	GB12358-2006,GB3836.1-2010				
standard	GB3836.2-2010,GB3836.4-2010				

## Lectotype table

Model	Detected gas	Range	Measurement principle
QS-1000-CO	Carbon monoxide	0-200/1000ppm	Electrochemical
QS-1000-CO-A	Carbon monoxide (H2)	0-200/1000ppm	Electrochemical
QS-1000-H2S	Hydrogen sulfide	0-50/100/200/1000/5000ppm	Electrochemical
QS-1000-O2	Oxygen	0-25%vol	Electrochemical
QS-1000-NO2	Nitrogen Dioxide	0-20/500ppm	Electrochemical
QS-1000-NO	Nitric Oxide	0-100/1000ppm	Electrochemical
QS-1000-SO2	Sulfur Dioxide	0-20/100/2000ppm	Electrochemical
QS-1000-CL2	Chlorine	0-20/200/2000ppm	Electrochemical
QS-1000-NH3	Ammonia	0-100/1000/5000ppm	Electrochemical
QS-1000-H2	Hydrogen	0-1000/10000/40000ppm	Electrochemical
QS-1000-H2-A	Hydrogen (CO)	0-1000ppm	Electrochemical
QS-1000-PH3	Phosphine	0-5/20/1000ppm	Electrochemical
QS-1000-CH2O	Formaldehyde	0-10/50/1000ppm	Electrochemical
QS-1000-O3	Ozone	0-5/20/100/1000ppm	Electrochemical
QS-1000-F2	Fluorine	0-1ppm	Electrochemical
QS-1000-HF	Hydrogen fluoride	0-10ppm	Electrochemical
QS-1000-HCL	Hydrogen chloride	0-20/200/1000ppm	Electrochemical
QS-1000-HBr	Hydrogen bromide	0-20/200/1000ppm	Electrochemical
QS-1000-C2H4O	Ethylene oxide	0-20/100ppm	Electrochemical
QS-1000-C4H8S	Tetrahydrothiophene	0-1000ppm	Electrochemical
QS-1000-SIH4	Silane	0-50ppm	Electrochemical
QS-1000-CLO2	Chlorine dioxide	0-20/200/2000ppm	Electrochemical
QS-1000-HCN	Hydrogen cyanide	0-100 ppm	Electrochemical
QS-1000-C2H4	Ethylene	0-10/200/1500 ppm	Electrochemical
QS-1000-H2O2	Hydrogen peroxide	0-100/500/2000 ppm	Electrochemical
QS-1000-EX	Combustible EX	0-100%LEL	catalytic combustion
QS-1000-CO2	carbon dioxide	0-2000/5000ppm/1%/5%/20 %/50%/100%VOL	infrared NDIR
QS-1000-SF6	Sulfur hexafluoride	0-1000/2000/3000ppm	infrared NDIR
QS-1000-CH4	Methane	0-5%/10%/20%/50%/100%V OL	infrared NDIR
QS-1000-Freon	Freon Refrigerant Gas	0-1000/2000ppm	infrared NDIR
QS-1000-VOC	Volatile organic compound	0-20/200/2000/10000 ppm	PID

 $\bigstar$  If you need other range or other special gases selection, please consult the sales engineer

