



# **FGD - 3030** FIXED GAS DETECTOR



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# Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net



The FGD-3030 is an Infra red Sensor Technology based type gas detector with smart transmitter. The sensor is integrated to the transmitter having digital LCD-LED display This detector uses high-performance infrared components and micro-control technology, combined with sophisticated SMD process manufacturing. It has good repeatability, temperature and humidity characteristics, as well as long service life and convenient operation.

The output signal of the detector is 4~20mA standard signal with optional HART

Besides Infrared Sensor the FGD-3030 is also available with Plug in SMART Sensors for Point Infrared, Oxygen and Catalytic Combustion. These sensors are replaceable type and can be replaced without any special tools.

### **>>** Features & Benefits

#### **Infra-Red Sensor**

Double beam infrared technology, dual compensated, Non-Dispersive IR (NDIR) with temperature compensation for excellent stability and minimal drift.

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### **Output Choice**

4-20mA RS-485 HART over 4-20mA (Optional)

### **Digital Display**

LED-LCD Display No Backlight Required Can be seen from Wide Distance

### **Optics**

Drty Optics warning with correct Operation upto 70-80% for NDIR Sensor. Easy Cleaning of Mirror or Sensor Replacement

### **Other Features**

Relay outputs for Alarm and Faults Non-Instrusive Calibration Intrinsically Safe HART Port (Optional) Smart Sensor modules for Point IR Toxics and VOC'S



# **>>** Specification :

Dimensions	210mm x 200mm x 105mm		
Weight	< 2 Kg		
Enclosure Material	Cast Aluminium Alloy or SS-316		
Sensor Housing Material	SS-316		
Ingress Protection	IP-66		
Cable Entry	Two 3/4" NPT		
Power	18-30VDC < 2W		
Electrical Output	4-20mA Current Sink or SourceRS-485 MODBUS RTU HART over 4-20mA Signal		
Display	Main Display: LED-LCD (Red) Indicators: Alarm 1, Alarm 2, Fault		
Relays	2 Configurable Relays5A@230VAC 5A@30VDC		
Intrinsically Safe HART Port	Optional		
Sampling Method	Natural Difusion with Chimney Effect		
Working Temperature	-40°C to +70°C		
Working Humidity	0~95% RH (no dews)		
Accuracy	± 1% for 0-100% range (NDIR) ± 2% to ± 3% for 0-100% range (TOXICS)		
Repeteability	± 2% FSD		
Warm-up Time	NDIR/Catalytic - 120 seconds Toxics - 60 seconds		
Zero Drift	± 2% FSD per year maximum		
Approvals	ATEX - Ex dB IIC T6 Cb PESO		
Testing	EN 60079-0: 2012 EN 60079-1: 2014SIL2		

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# Sensor Ranges :

TARGET GAS	RANGE	RESOLUTION	SENSOR TYPE	<b>RESPONSE TIME</b>
	0~100% LEL	1% LEL		
CH4 0~5% VOL 0~100% VOL	0~5% VOL	0.01% VOL	Catalytic Combustion	T <sub>90</sub> <30 Sec (Cat)
	0~100% VOL	1% VOL	Non-Dispersive IR	T <sub>90</sub> <30 Sec (NDIR)
C₃Hଃ	0~100% LEL	1% LEL		
H2	0~100% LEL	1% LEL	Catalytic Combustion	T <sub>90</sub> <15 Sec
	0~100 ppm	1ppm	Electro chemical	T <sub>90</sub> <10 Sec
CO2	0~5% VOL	0.01% VOL	Non-Dispersive IR	T <sub>90</sub> <3 Sec
	0~6000 <u>pp</u> m	1 ppm	Non-Dispersive IR	T <sub>90</sub> <3 Sec
C4H10	0~100% LEL	1% LEL	Non-Dispersive IR/ Catalytic Combustion	T <sub>90</sub> <3 Sec (Cat)T <sub>90</sub> <3 sec(NDIR)
со	0~1000 ppm	1ppm	Electro chemical	T <sub>90</sub> <10 Sec
	0~500 ppm	1ppm	Electro chemical	T <sub>90</sub> <10 Sec
H₂S	0~100 ppm	1ppm	Electro chemical	T <sub>90</sub> <10 Sec
	0~30 <u>pp</u> m	1ppm	Electro chemical	T <sub>90</sub> <10 Sec
02	0~30 VOL	0.1% VOL	Electro chemical	T <sub>90</sub> <10 Sec
NH₃	0~100 ppm	1ppm	Electro chemical	T <sub>90</sub> <10 Sec
	0~1000 ppm	1ppm	Electro chemical	T <sub>90</sub> <10 Sec
SO2	0~100 ppm	1ppm	Electro chemical	T <sub>90</sub> <10 Sec
Cl2	0~20 ppm	0.1ppm	Electro chemical	T <sub>90</sub> <10 Sec
VOC	0~1000 ppm	1ppm	PID	T <sub>90</sub> <10 Sec
NO <sub>2</sub>	0~100 ppm	1ppm	Electro chemical	T <sub>90</sub> <10 Sec
ETO	0~100 ppm	1ppm	Electro chemical	T <sub>90</sub> <10 Sec
HCN	0~100 ppm	1ppm	Electro chemical	T <sub>90</sub> <10 Sec

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# HPLC Servicing, Validation, Trainings and Preventive Maintenance :

HPLC Servicing :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost. Trainings :We also take up preventive Maintenace to reduce downtime of HPLC's Trainings.

AMC's/CMC :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, troubleshooting.

Validations :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

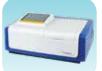
:Instruments :We offer instruments/Renting Services Modules like pumps,detector etc. on Rent. Instruments



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Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufaturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

# **Our Products & Technologies**



UV/VIS Spectro 2080+ Double Beam



**Optical Emission** Spectrophotometer



Fully Automated

CLIA

Infra FTIR





NOVA-2100

Chemistry Analyzer



Chromatograph 3007



Semi Auto Bio Chemistry Analyzer



Optima Gas Chromatograph 2979 Plus



HEMA 2062 Hematology





URINOVA 2800

Urine Analyzer



Liquid Partical Counter



Total Organic



Water purification system

PCR/Gradient PCR/

RTPCR

Analyzer



TOC

Analyzer



Micro Plate Reader/Washer



Laser Particle Size Analyzer

Ion Chromatograph

Atomic Absorption Spectrophotometer



Flash

Chromatograph







# Regulatory compliances



## **Corporate Social Responsibility**

Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



1.Research & Innovation Scientist's awards/QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personallities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at Info@analyticalfoundation.org

2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXIFY human minds, souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.



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