



# MULTI GAS ANALYZER (MODEL : GA - 3250)

**Continuous Emission Monitoring System** 





Advanced CEM Dual Sensor Technology for Accurate Measurement of Flue Gas Components to meet todays regulatory requirements ensures stable long term ultra - low drift operations.

EPC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited An ISO 9001 Certified Company www.analyticalgroup.net



#### **>>** CONTINUOUS EMISSIONS MONITORING SYSTEMS

Advanced Dual Sensor Technology affords the ultimate in performance, and eliability. It incorporating well proven electrochemical technology into a truly continuous system, and Provides high measurement stability and accuracy.



Engineered for the future these analysers are extremely compact, and are ideal for incorporation into custom-built systems. All application are consit ered on as individual basis and solutions engineered to meet specific requirements of the project.

#### **Feature & Benefits**

- Fully integrated system Up to 7 gases in a single compact analyser.
- Wide measurement range From 0 100 PPM up to 0 10,000 PPM.
- Widely accepted, certified performance Complies with the latest monitoring standards.
- Simple installation & maintenance Requires no specialist skills or training, all maintenance carried out on-site.

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- Highest measurement performance Ultra low drift measurement technology.
- Measured Total NOx (NO+NO2) Separate sensors for true NOx monitoring.
- Record and store vital emission data Internal data logging function.
- Combustion efficiency measurement option.
- For a Optimization process efficiency where condition are changing.

### Applications

- Gas turbines
- Power plants
- Boiler systems coal, oil and gas fired
- Incinerators domestic, hazardous,
- clinical and biological waste
- Wood, sawdust, pellet and bark burners

- Thermal oxidisers
- Pulp and paper
- Cement & lime manufacture
- Gas pipeline compressors
- Bio-fuel power generation
- Petrochemical and refineries



#### **Engineered for the future**

- •Excellent low level emissions capability Wide range of sensor to provide the precision neces sary for the level measurement required by legislative limits.
- •Heated sample line not required in most applications Sample gas is cooled & dried inside the sample measurement system.

#### >> Data Acquisition and Reporting

Comprehensive data acquisition and analysis systems are available. The PC-based software is a highly flexible and fully configurable data acquisition and reporting system for continuous emissions monitor ing systems. This inherent flexibility enables it to meet the requirement of Environmental Regulation.



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#### >> Probes and Sample Lines for all Applications

Our experience will help determine which probe and type of sample line will give the best possible results in your applications. A full range of heated and unheated probes, filters and sample lines is avail able to meet all requirements, and more importantly, to keep operating continuously and very efficiency, with the minimum of maintenance.

- Heated filter probes
- Ceramic probes for hot or acidic conditions
- Regulated and self-regulating heated sample lines
- Unheated sample lines

#### Operation

FGA is an extractive sampling multi-gas analyser system. The flue gas is extracted using a sample Probe. The gas is than transported via a sample line, to the cooler unit fitted inside the sample management system, where the moisture and particulates are removed before being directed into the measurement system. The measurement system is made up of pairs of sensor. Each sensor is Fed alternately with sample gas and air. The sensors generate an electrical output in proportion to a specific gas component. Measured values are then displayed and output as analog signals (4-20-mA).

#### Accurate & Reliable SO2 Analysis

FGA-3008 is an accurate and reliable SO2 analyserImportantly, it is a low cost alternative to infraror UV systems, using the latest Advanced Dual Sensor technology. The accuracy & reliability of the Analyser in the measurement of SO2 begins with the sample conditioning system. A cooler and acid resistant sample path ensure there is no significant loss during gas transportation. High accuracy sensors inside the analyser produce a reliable, stable output.

#### Ideal for Low NOx Measurement

Analyser designed for very low NOx measurement, importantly, the analuser measures both NO and NO2 separately, these are combined to give a true NO2 measurement output. The inherent problems with catalytic NO2 convertors are therefore completely avoided.

#### **>>** SPECIFICATIONS

Technique	Advanced Dual Sensor Technology
Optional	Single Sensor Technology IR/UV Sensor Technology
CO Ranges	0-10 PPM upto 0-1,00,000 PPM (10%)

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NO Ranges	0-10 PPM upto 0-50,000 PPM (5%)
CO Ranges	0-10 PPM upto 0-1,00,000 PPM (10%)
NO2 Ranges	0-10 PPM upto 0-1000 PPM (0.1%)
SO2 Ranges	0-10 PPM upto 0-10,000 PPM (1%)
CO2 Ranges	0-3 Vol % upto 0-100 Vol %
Resolution	0 - 1 PPM (CO, NO, No2, & SO2); 0.1% (Co2)
Linearity	<2% of range
Zero drift	< 2% of range per month
Span drift	< 2% of range per month
O2 Ranges	0 - 5 Vol% to 0-25 Vol%
Resolution	0.01 Vol%
Linearity	< 0.2 Vol%
Zero drift	< 0.2 Vol% per month
Span drift	< 0.2 Vol% per month
Calibration method	Manual or Automatic 2-Point calibration span and zero 2-Point calibration span and zero
Display Type	Alpha numeric LCD back light
Outputs/Inputs Analogue outputs	Isolated current loops One per gas 4-20 mA
Relays outputs	One per gast
Relay rating	Isolated change over contacts rated 0.5A @ 125V AC
Communications	RS 232 or RS 485 Modbus serial digital data bus (2 or 4 wire)



Environmental Enclosure	19" Rack
Operating (ambient) Temp.	40deg C to + 50deg C
Power supply	200 to 240V a.c, 50-60 Hz
Power consumption	400 w
Gas & Air Require- ments Instrument air (zero calibration)	4 bar / 60 psi min. clean dry & solvent free; 10 1/min
Calibration gas (recommended)	1 bar / 15 psi; 2L/min approx
Calibration gas type	Specific to each gas type & measurement span
Dimensions (H x W x D)	570x600x370 mm 24x24x12 mm
Options	Automatic Calibration Twin Stream variant Remote Diagnostics



#### Servicing, Validation, Trainings and Preventive Maintenance :

: We have team of service engineers who can attend to any make of instrument Servicing promptly @the most affordable cost.

- :We also take up preventive maintenance to reduce downtime of instrument's Trainings Trainings.
- AMC's/CMC : We offer user training both in-House and at customer sites on instrument principles. operations, troubleshooting.
- : We have protocols for carrying out periodic Validations as per GLP/ GMP/USFDA Validations norms.

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





#### About Analytical Technologies

Analytical Technologies synonymous for offering technologies is for doina analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the globe. Analytical Technologies Limited is an ISO :9001 Certified Company engaged in Designing, Manufaturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Clinical Diagnostics, Material Science & General Laboratory Technology, Bio Medical, 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







PCR/Gradient PCR/ RTPCR

Analyzer

TOC

Laser Particle Size Analyzer



Ion Chromatograph Water purification system



Liquid Partical Counter

Total Organic



### 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 possible innovation is 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.

## Reach us @





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