

# GAS ANALYZER

Model : GA - 200



Protects Personnel, Plant & Assets



A COMPLETE VERSATILE, MULTI - FEATURED,  
MICROCONTROLLER BASED GAS ANALYZER FOR  
ONLINE MEASUREMENT OF GASES



ANALYZER CONFIGURABLE WITH  
NDIR  
EC

UV SPECTROSCOPY #

FLUORESCENCE #

CHEMILUMINESCENCE #

TDLAS - TUNABLE DIODE LASER ABSORPTION SPECTROSCOPY #

PAS - PHOTO ACOUSTIC SPECTROSCOPY #

## APPLICATION :

- ENVIRONMENT INDUSTRY
- MEDICAL ENGINEERING AND RESEARCH
- AGRICULTURE BIOMAS
- AUTOMOBILE
- CLEAN ROOM MONITORING
- SHIPPING INDUSTRY



# Contact HNL for technology as per your requirement.

HNL Systems Pvt. Ltd.

Administrative & Sales Office: 25/N, Laxmi Industrial Estate, New Link Road, Andheri (W), Mumbai – 400 053, India. Tel : +91 22 4295 2180 / 81.

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## TECHNOLOGY

- ▶ The Model GA - 200 series gas analyzer is suitable for the continuous measurement of the concentrations of gases such as CO, CO<sub>2</sub>, SO<sub>2</sub>, HF, HCL, CL<sub>2</sub>, NO, CNG, O<sub>2</sub>, CH<sub>4</sub>, H<sub>2</sub>, H<sub>2</sub>S, NH<sub>3</sub>, HCN, O<sub>3</sub>.
- ▶ Maximum number of sensors depends on sensor technology required.
- ▶ The simplicity of operation makes GA - 200 analyzer, a valuable aid for continuous use in various applications, changing the measuring parameters.
- ▶ Its versatile modular design permits configuration and up-gradation to suit specific needs of customer in selection of gases to be measured.
- ▶ GA - 200 is available with highly up-gradable micro-controller based electronics which is equipped with battery backup for RAM to retain the existing set modes in case of power failure.
- ▶ Any unacceptable deviation from the standard stored values is displayed as an indication "FAULT".
- ▶ GA - 200 gas analyzer is highly used and recommended for various industrial applications.
- ▶ Sensor technology depends upon the application of industry.

## SPECIAL FEATURES

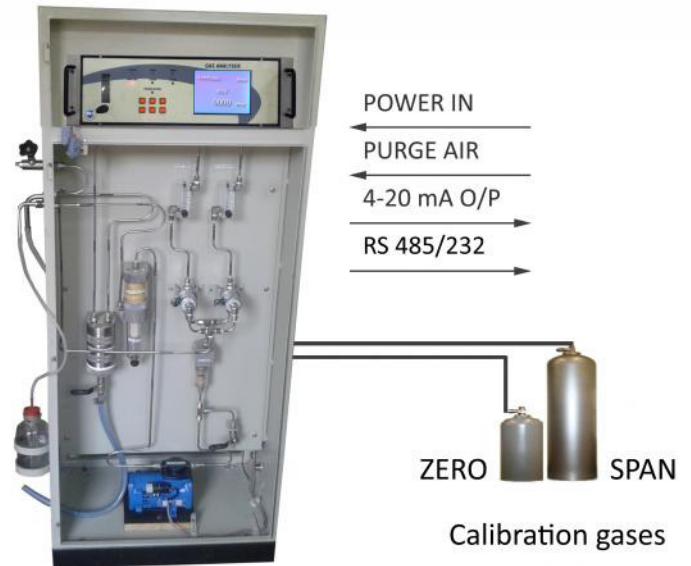
- Sample conditioning system offered as per the application
- Complete automatic operation
- 4" Graphical display which includes circuit tests & sampling flow rate
- Self diagnostic check facility
- Mere six keys to operate the complete instrument

## APPLICATIONS

- Environment Industry
- Medical Engineering and Research
- Agriculture Biomass
- Automobile
- Clean room Monitoring
- Shipping Industry
- Stack or exhaust gas analysis
- Power & industrial plants
- Coke oven
- Fuel efficiency / optimization of combustion
- Process analysis



GA - 200



GA - 200 along with Sampling System

## GA - 200

### SPECIFICATION

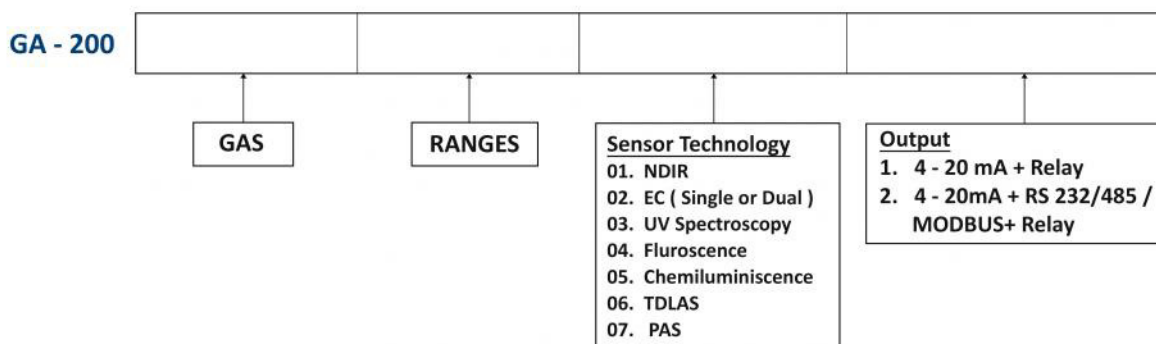
Type	Rack / panel mount
Detectable gases / parameters	Toxic, Combustible, O <sub>2</sub>
Electronics / processor	Micro-controller
Power supply	230 V AC
Display	Graphic LCD
Alarm	Controlled alarms
Output	4 - 20 mA Standard, Individual relay
Digital Output	RS - 232, RS - 485, MODBUS, ETHERNET port
Technology	1. Sensor Specific (Electrochemical/TCD/PID) 2. Infra-red Technology (NDIR)
Resolution	1 mg/m <sup>3</sup> , 1 PPM, 1% V/V, application defined
Accuracy	± 2 % FS
Response time	Sensor dependent
Operating temperature	0 - 55 °C
Sampling / input	Direct plug-in through sampling system / 4 - 20 mA
Housing / case	19" rack mounting
Enclosure	Aluminium casing (power coated) for indoor application
Warm up time	Analysis / detector dependent
Physical dimensions	43.3 x 26 x 15.2 cm

# MEASURING RANGES

\*Gases and ranges are only indicative. Contact HNL for special gas / vapour & range

PARAMETERS	RANGE	RESOLUTION	ACCURACY
<b>FOR UV</b>			
O <sub>3</sub>	0 - 50 PPM	1 PPM	± 2%
H <sub>2</sub> S	0 - 500 PPM	0.1 PPM	± 2%
SO <sub>2</sub>	200 PPM, 2000 PPM	1 PPM	± 2%
NO	0 - 5000 PPM	1 PPM	± 2%
NO <sub>2</sub>	0 - 2000 PPM	1 PPM	± 2%
NH <sub>3</sub>	0 - 1000 PPM	1 PPM	± 2%
C <sub>6</sub> H <sub>6</sub>	0 - 1000 PPM	1 PPM	± 2%
CL <sub>2</sub>	0 - 1000 PPM, 1 %V/V	1 PPM	± 2%
<b>FOR INFRA - RED</b>			
CO	0 - 100 %V/V	1 PPM	± 2%
CO <sub>2</sub>	0 - 100 %V/V	0.1 %	± 2%
CH <sub>4</sub>	0 - 100 %LEL	1 %V/V	± 2%
<b>FOR ELECTROCHEMICAL</b>			
O <sub>2</sub>	100 PPM	1 PPM	0.5 %
CO	0 - 2000 PPM	1 PPM	± 2%
NOX / NO	0 - 2000 / 0 - 5000 PPM	1 PPM (0.1)	± 2%
SO <sub>2</sub> / SOX	200 PPM, 2000 PPM	1 PPM	± 2%
HF	0 - 50 PPM	0.1 PPM	± 2%
CL <sub>2</sub>	0 - 50 PPM	0.1 PPM	± 2%
H <sub>2</sub> S	0 - 500 PPM	0.1 PPM	± 2%
O <sub>3</sub>	0 - 50 PPM	1 PPM	± 2%
HCHO	0 - 1000 PPM	1 PPM	± 2%
CH <sub>4</sub>	0 - 100 %LEL	1 %V/V	± 2%
CL <sub>2</sub>	0 - 1000 PPM	1 PPM	± 2%
<b>FOR CHEMILUMINESCENCE</b>			
NO	0 - 500 PPM	1 PPM	± 3%
NO <sub>x</sub>	0 - 500 PPM	1 PPM	± 3%
NO <sub>2</sub>	0 - 500 PPM	1 PPM	± 3%
SO <sub>x</sub>	0 - 500 PPM	1 PPM	± 3%

## ORDERING INFORMATION



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