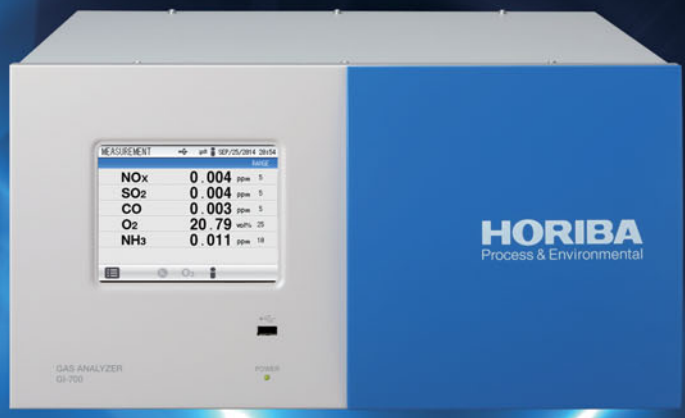
HORIBA
Process & Environmental

Stack Gas Analyzer

GI-700 Series



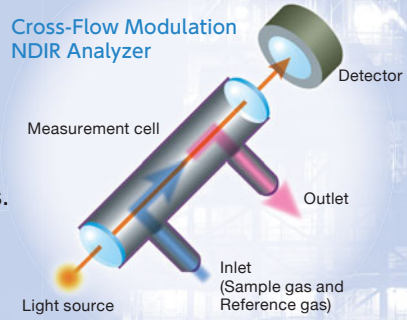
Increase your CEMS Capabilities with a HORIBA Multi-gas Analyzer

Experience HORIBA, the Global Single Source Solutions Provider with over 50 years of technological advancements and unparalleled reliability, dependability and operability.
The GI-700 stack gas analyzer is designed to continuously measure the concentrations of nitrogen oxides (NOx), sulfur dioxide (SO_2), carbon monoxide (CO), carbon dioxide (CO_2), oxygen (O_2) and ammonia (NH_3) in stack flue gas streams.

Stack Gas Analyzer
GI-700 Series

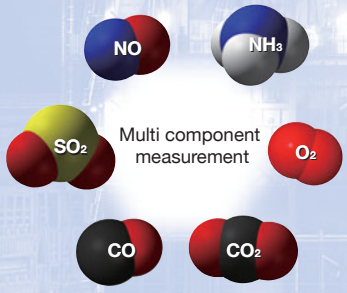
Features

1 Ultimate Dependability
Proven cross flow modulation technique
Continuous base line validation



2 Ultimate Low cost ownership
Up to 6 gases can be measured using a single analyzer with multiple detectors.
Works with a simple sampling unit having less tubing, fewer power cables.
Simplified wiring translates into less time required for installation.
Minimum function for the operation. Any additional functions can be added from controlling PLC.

3 Ultimate Sensitivity
5 ppm High-Precision measurement (NOx, SO_2, and CO) is available.

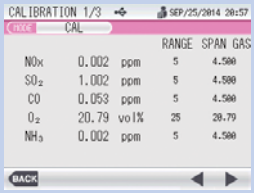


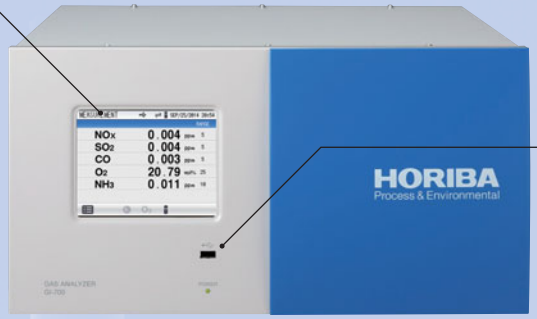
[Others]
- An external converter provides for separate measurements of NO and NO_2.
- All component modules can be easily installed with in a single 19 inch case. The compact design saves space, facilitates maintenance and requires less wiring and tubing during installation.
- Power consumption is reduced by approximately 50% as compared to systems using individual analyzers (NH_3 analyzer).

User Friendly

LCD color touch panel

All operations, including calibration and measurement can be performed on the touch screen. The high visibility 5.7 inch color display makes it easy to check the status.





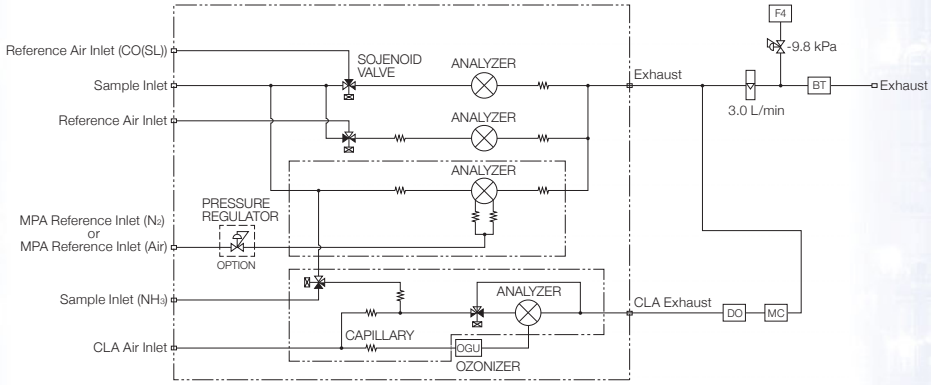
USB Port

Storing data on USB flash memories enables easy data management on PCs. (Measured value, Alarm, Calibration history)
＊HORIBA recommended USB is available.

Back Panel

- CLA Exhaust
- Reference Air Inlet
- CLA Air Inlet
- Serial communications
  Modbus™, Ethernet (Modbus address will be disclosed)
  ＊Modbus is a trademark of Schneider Electric Inc.
- Sample Inlet (NH_3)
- Sample Inlet
- Exhaust
- MPA Reference Inlet (N_2)
- Reference Air Inlet (CO(SL))
- MPA Reference Inlet (Air)
- Ventilation Fan
- Power Switch
- AC100-240 V
- Digital Input: 8 channels 24 V / 10 mA
- Digital Output 1: 8 channels 24 V / 0.5 A
- Digital Output 2: 8 channels 24 V / 0.5 A
- Analog Output: 6 channels 4-20 mA, 0-1 V, 0-5 V
- Option

■Flow schematic (NOx, SO_2, O_2, NH_3, CO)



Various Applications

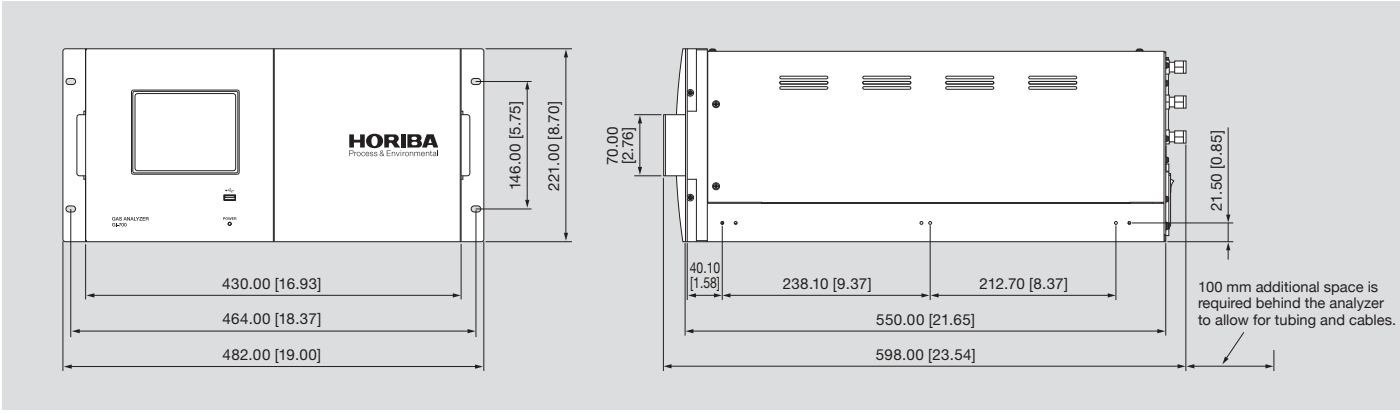
Applications include:
Stack emmision monitor, SCR control, Desulfulization control, Green house gas monitor, Boiler emission, Gas separation, Coal fired gas, Natural fired gas etc...

Specifications

Model		GI-700													
Component		NOx		SO_2		CO					CO_2		O_2		NH_3*2
Measurement methods		CLA (High sensitivity)	NDIR (Standard)	NDUV (High sensitivity)	NDIR (Standard)	NDIR (High sensitivity 1)		NDIR (High sensitivity 2)	NDIR (Standard)	NDIR (High concentration)	NDIR (Standard)	NDIR (High concentration)	MPA (N_2 carrier)	MPA (Air carrier)	CLA (diferential method)
Range	Standard	10-5000 ppm	200-5000 ppm	10-1000 ppm	200-5000 ppm	—	—	50-500 ppm	200-5000 ppm	—	5-25 vol%	—	5-25 vol%	10-25 vol%	10-100 ppm
	Optional	5 ppm	—	5 ppm	—	5 ppm	10-100 ppm	—	100 ppm	1-5 vol%	—	10-50 vol%	—	—	—
Range Ratio	Standard	1:10	1:10	1:10	1:10	—	—	1:10	1:10	—	1:5	—	1:5	1:5	1:10
	Optional	1:20	1:20	1:20	1:20	1:1	1:10	—	1:20*1	1:5	—	1:5	—	—	—
Indicated error (Linearity)		± 1.0% of full-scale value for each component and range (Standard range ratio) ± 2.0% of full-scale value for each component and range (Optinonal range ratio)													
Zero drift		± 1.0%/week of full scale (standard range) (if the ambient temperature change is ≤ 5°C) ± 2.0%/week of full scale (optional range and O_2 carrier specification O_2 analyzer) (if the ambient temperature change is ≤ 5°C)													
Span drift		± 2.0%/week of full scale (if the ambient temperature change is ≤ 5°C)													
Response time		T_{90}=45 s from the analyzer inlet													
Interference		±2.0% of full scale													
Environment Condition	Temperature	0° to 40°C (No direct sun light or no radiation heat)													
	Humidity	≤ 90%													
Measuring Gas Condition		Temperature: Ambient temperature, NO: Up to 5000 ppm, NO_2: None, SO_2: Up to 5000 ppm, SO_3: None, CO: Up to 5000 ppm, CO_2: 3 vol% to 15 vol%, O_2: 0.2 vol% to 15 vol%, HCl: None, H_2O: Saturated at 5°C, Dust: None													
Sample inlet tube		Polytetrafluoroethylene tube (6 mm O.D./4 mm I.D.)													
Sample gas pressure		Atmospheric pressure ± 4 in. W.C.													
Pressure control		Not including (Vacuum regulator (-9.8 kPa))													
Calibration gas	Zero gas	Nitrogen													
	Span gas	Gas to be measured													
Carrier gas for (oxygen analyzer)		Nitrogen (for N_2 carrier specification), Air (for air carrier specification)													
Air for ozone generation		Dry air (saturated at ≤ -30°C)													
Power supply		100 - 240 VAC (Depends on components)													
Power frequency		50/ 60 Hz for common use													
Power consumption		240 VA													
Materials in contact with sample gas		PTFE, Nylon, PP, FKM, SS304, SS316													

*1: A range ratio of 1: 40 is also possible for special applications.
*2: A range ratio of CLA NH_3 and CLA NOx should be 1: 5 or less.

Outline Drawings (mm [inch])



Please read the operation manual before using this product to assure safe and proper handling of the product.

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Bulletin:HRE-2883A

Printed in Japan TS-TH(SK)23