

Generator Gas Analyzer

You can't underestimate the importance of monitoring hydrogen. When hydrogen purity drops, windage losses and operating costs increase, resulting in lost revenue and profitability. Gas purity is also a critical life safety issue, making monitoring for potentially explosive levels essential.

SPECIFICATIONS

MEASUREMENT CHARACTERISTICS

Technology Principle	Thermal Conductivity
Case Purity	70% to 100% H2 in Air
Purge	0 to 100% H2 in CO2 0 to 100% Air in CO2
Flow Rate	100 to 700 cc/min
Accuracy	+/- 1% of full scale @ 80% to 100% H2 in Air

ELECTRICAL CHARACTERISTICS

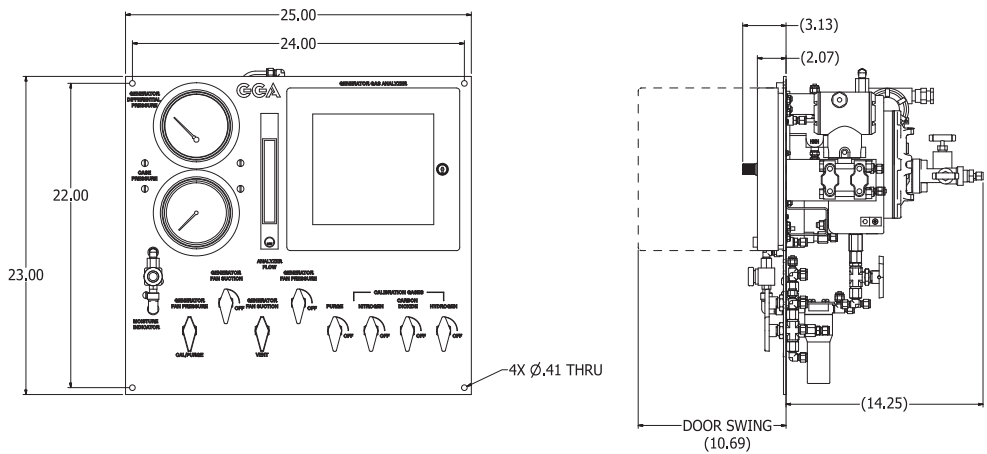
Input Voltage	115/230 VAC
Input Frequency	50/60 Hz
Output Signal	4-20 mA current output, self-powered
Output, Relays	30V/1.0 A DC, 120V/0.5 A AC
Alarm, NO and NC	125V/0.005 A resistive DC
Warning, NO and NC	
Trouble, NO and NC	
Normal, NO and NC	
Area Classification	Class I, Zone 2, Group IIB + H2

MECHANICAL CHARACTERISTICS

Overall Dimensions Based on configuration

ENCLOSURE DIMENSIONS

System Electronics Enclosure	11" x 12" x 9.25"
Sensor Cell Enclosure	8" x 10" x 6.25"
Display Enclosure	0.5" x 8.5" x 6.25" or panel
Valve Panel (optional)	mounted per requirement
Temperature	32-158 F (0-70 C), optional
Relative Humidity	0-95%
Gas Pressure	100 psi maximum
Gas Connections	1/4" female NPT



The GGA is a triple-range sensor/analyzer that provides

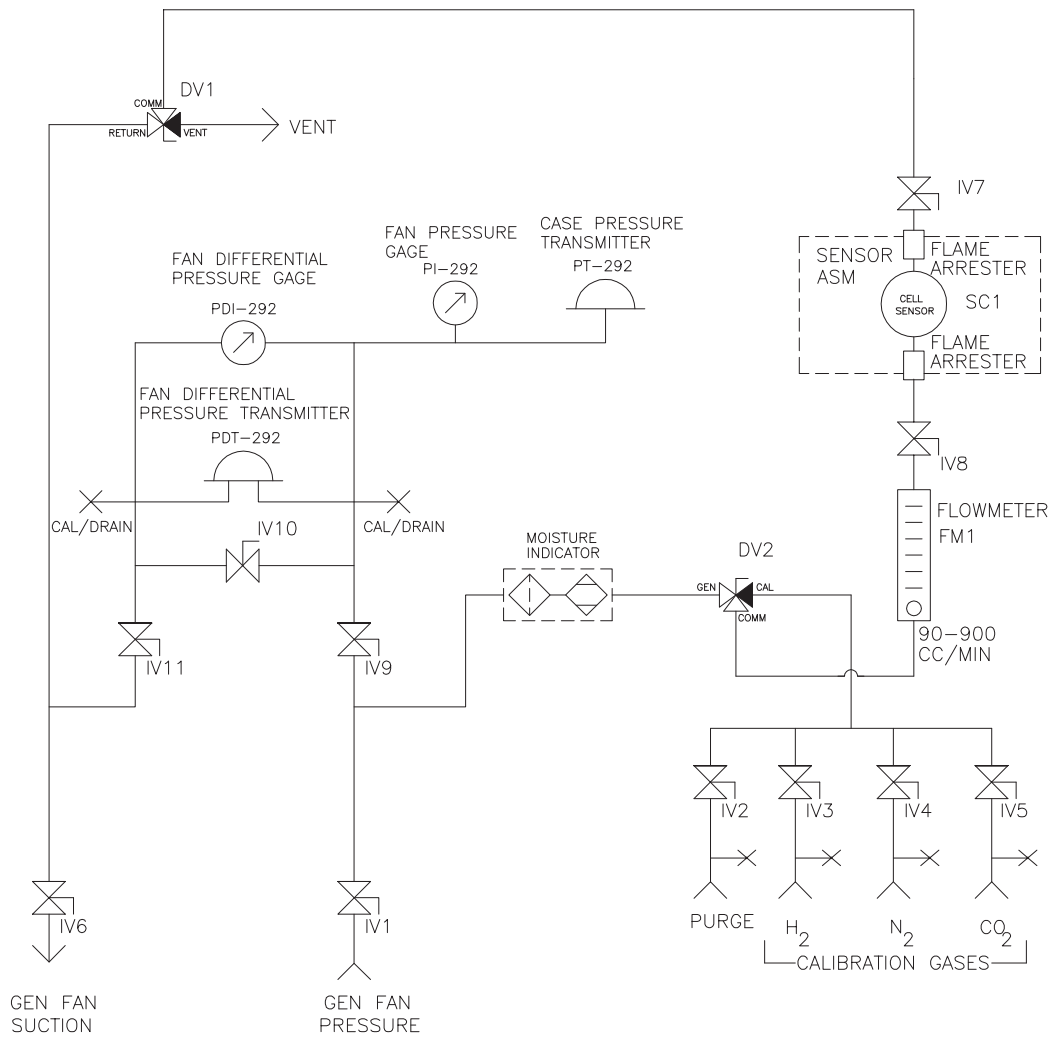
continuous monitoring of gas purity during all phases of generator operation. We've taken a proven monitoring principle — thermal conductivity — and improved upon it. The result of E/One's development work is an extremely accurate, robust and stable system that eliminates the issues of drift and need for frequent recalibration seen in other thermal conductivity systems.

E/One supplies GGA systems in a range of configurations, from stand-alone sensor/analyzers and retrofit "drop-in" replacement systems to comprehensive hydrogen control cabinets that not only monitor gas purity, but provide continuous monitoring of case and differential pressures and interact with plant control systems to assure the highest levels of generator efficiency.

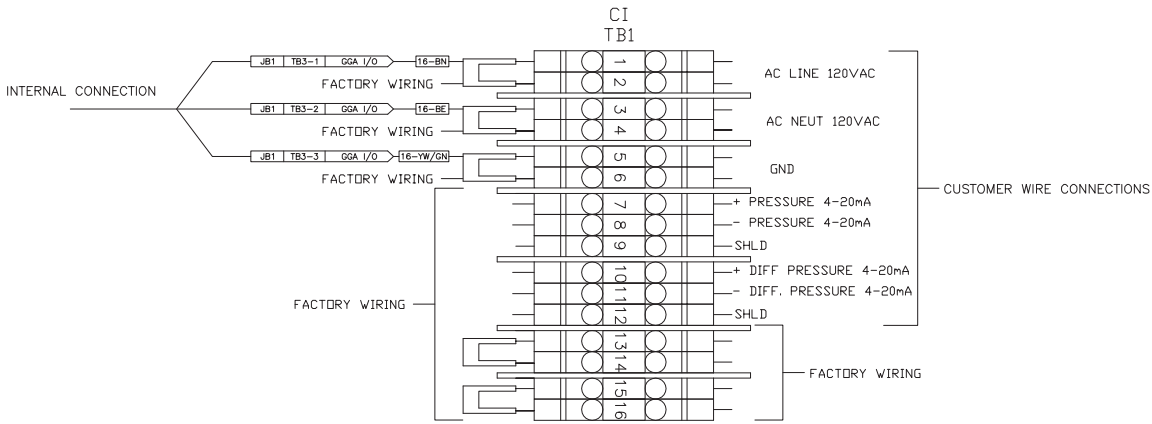
FEATURES AND BENEFITS

- Increased generator efficiency and safety
- Microprocessor controlled
- Designed for hazardous location operation
- Custom configurations to meet site-specific requirements
- Suitable for new and retrofit applications

P & ID

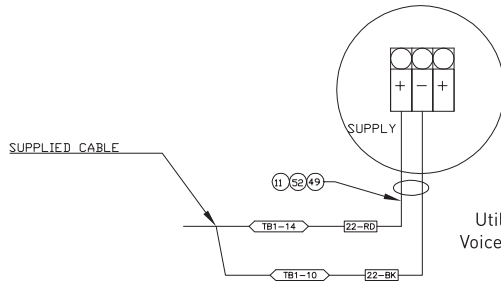
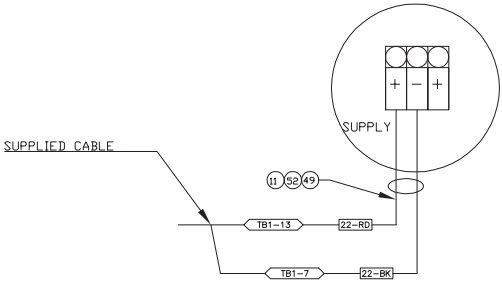


CUSTOMER INTERFACE



CASE PRESSURE TRANSMITTER

DIFFERENTIAL PRESSURE TRANSMITTER



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