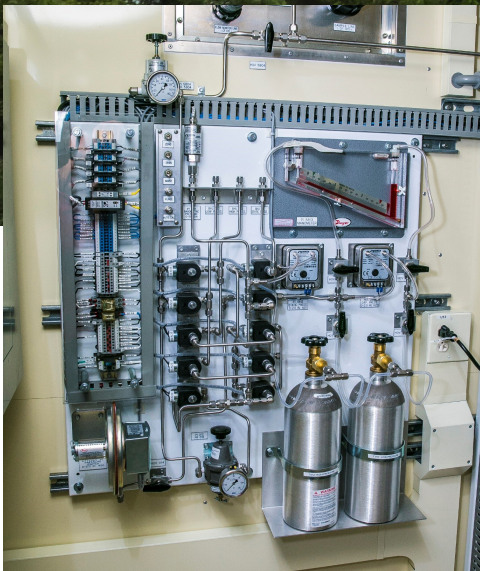




CEMS Flow-500 Stack Flow Monitor

Delivering Reliable Stack Flow Monitoring for Your Compliance Needs



A stack flow monitoring system is an integral part of every Continuous Emissions Monitoring System (CEMS). Differential-pressure flowmeters, such as averaging pitot tubes, are understood to be the leading technology for measuring stack flow and are often used for official stack testing.

The CEMS Flow-500 developed by Trace Environmental, Inc., leverages pitot tubes to create a reliable, accurate and stable monitoring system that is easy to check, test and maintain.

EPA Approved: Fully PS6 compliant and meets or exceeds all EPA regulatory requirements for flow monitoring. Automatic daily calibrations are included.

Applications include: Biomass fired boilers, coal-fired boilers, incinerators, oil fired sources, and more.

Reliable: Designed to work in the most corrosive of environments with moderate to heavy particulate loading in the gas, moisture content, and the chemical compound of the gas.

Accurate: Utilizing the industry standard pitot-type primary element along with type "K" thermocouples provide accurate raw and corrected readings.

Stable: Self-evaluating smart electronics that continually monitor conditions and correct accordingly.

For those permit condition CEMS applications that call for stack flow monitoring – CEMS Flow-500 is your reliable, compliant answer!

Selecting the best stack flow monitoring system for your application typically depends upon several factors that include gas temperature, ambient temperature, flowmeter location, available straight run, amount of particulates in the gas, moisture content, and the chemical composition of the gas. The CEMS Flow-500 from Trace Environmental, Inc., addresses all these conditions.

Specifications

| | |
|--|--|
| Product: | CEMS Flow-500 Air Flow Monitor w/ Smart Module |
| Stack Mounted Enclosure | |
| NEMA Rating: | 4X |
| Stack Mounted Enclosure Size: | 18"H x 17" W x 18" D |
| Flange Size: | 4" – 150 LB. |
| Power Requirements: | 120 VAC 60 HZ / 5A Maximum (Available in 24 VDC version) |
| Instrument Air Requirements: | Dry, clean air at 80-100 PSIG (ISA-S7.3) |
| Barometric Pressure Range: | 0-15 PSIG |
| Static Pressure Range: | 0-0.1, 0 – 0.25, 0 – 0.5, 0 – 1, 0 – 2, 0 – 3, 0.5, 0 – 10, 0 – 25, 0 – 50" H ₂ O |
| DP Pressure Range: | 0-0.1, 0 – 0.25, 0 – 0.5, 0 – 1, 0 – 2, 0 – 3, 0 – 5, 0 – 10, 0 – 25, 0 – 50" H ₂ O |
| Manometer Pressure Range: | 10-0-1.0" H ₂ O |
| Process Air Temperature Range: | 0° to 1200° F (-20° to 650° C) |
| Ambient Temperature Range:- | -20° to 160° F (-29° to 72° C) |
| Manual Calibration | |
| Switch Manifold: | (3) SPST toggle switches are provided for manual/local control of air flow monitor; (2) Momentary pushbutton is provided for a manual Auto Cal sequence |
| Calibration Pressure | |
| Switch Range: | 0.20-1.0, 1.0-3.0" H ₂ O |
| Accuracy: | ±0.25% of full scale |
| Linearity: | ±0.25% of full scale |
| Hysteresis: | 0.02% full scale |
| Repeatability | ±0.05% of full scale |
| Response Time: | < 500 ms |
| Output Signal for Temp Trans: | 4-20ma *Standard* |
| Output Signal for Barometric, | |
| Static and DP Trans: | 4-20ma on a self-powered 24VDC loop, 1 – 5 VDC Optional |
| Smart Module PLC: | |
| Digital Input (VDC): | 14 Channels |
| Relay Output (VAC): | 10 Channels |
| Analog Input (4 – 20 mA or 0 – 5 VDC): | 4 Channel (Std.) |
| Analog Output (4 – 20 mA or 0 – 5 VDC): | 4 Channel (Std.) |
| Communication port: | Serial DF1 |
| Operator Display: | 4½ Digit Panel Meter |

Headquartered in Sparta, New Jersey, Trace Environmental has offices and personnel across the United States, including in Florida, Georgia, Iowa, Nebraska, and Pennsylvania.



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