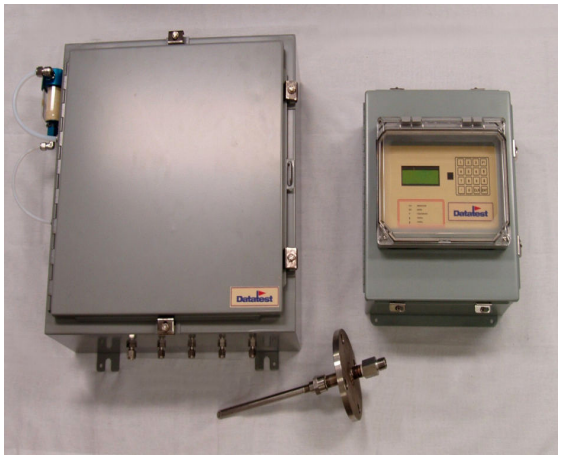
Model DT 3006 – Close Coupled Oxygen / Combustibles Analyzer



ADVANTAGES:

- Microprocessor Controlled
- Single Probe / Single Control Unit
- Bowl Filtration/Moisture Removal System
- Auto Calibration and Drain Capabilities
- Probe Temperatures up to 3200°F
- Modular Design

The Model DT 3006 measures oxygen and total combustibles or carbon monoxide by using an eduction system to draw sample from a process stack or duct over a relatively short distance to present it to a pair of sensing cells. The first is a Zirconia sensor for measuring the oxygen. The second is either a platinum catalytic bead sensor for total combustible or an electrochemical sensor for carbon monoxide. The sensor chosen depends upon the accuracy and the measurement levels required, and whether total combustibles or carbon monoxide is the gas to be measured.

The control unit takes these cell signals and produces linearized readings. The readings are displayed on the backlit 4 x 20 character LCD. The microcontroller outputs a 4-20mA signal for each sensor. A Modbus RTU serial port configured for RS232 or RS422 is available. The microcontroller also has relay contacts added to perform automatic back purge and calibration gas injection and remote alarm indication.

All setup functions are enabled through the keypad. Our menu driven prompts, such as: output range, calibration times and duration, back purge time and duration and calibration gas concentrations, allow the user to configure the system.

The analyzer comes customized as a complete self-calibrating monitoring system, which also provides the eductor and drain/backpurge solenoids.

After initial setup, this system will run on its own with very little maintenance, until a sensor needs replacing. All sensors have a mean time to failure of two years.

Should a close-coupled "O_2 only" analyzer be required, as opposed to an insitu unit, the DT3006 can be supplied with only the O_2 cell, while still having all the features of the DT 3006.

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Model DT 3006 – Close Coupled Oxygen / Combustibles Analyzer

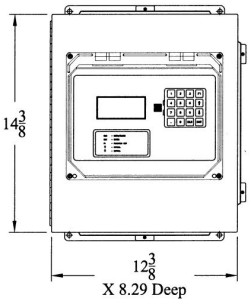
Specification

	Oxygen	CO
Sensor	Zirconia	Platinum Catalytic Bead / Electrochemical
Measurement	Eductive – Extractive	Eductive – Extractive
Range	0-25%	0-10% or 0-100% LEL (multiple ranges)
Accuracy	± 1 % of FS	± 5% of FS
Drift	Meets USEPA - 40CFR60 Appendix B P .S. 3	± 5%/168 hours at constant flue gas temperature
Response Time	3 seconds to 90% value at sensor	5 seconds to 90% value at sensor
Sensitivity	0.1 % (25% scale)	0.1 % (10% scale)
Repeatability	± 0.5% of FS	± 0.5 % of FS
Flue Gas Temperature	1500°F standard up to 3200°F optional	1500°F standard up to 3200°F optional

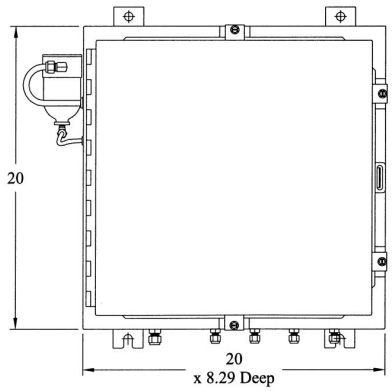
Control Unit

Ambient Temperature	-20°F to 125°F
Probe to Control Unit	500 ft. maximum
Control Unit Enclosure	Panel Mount (wall mount NEMA 4 optional)
Power Input	115V ± 10% (230V optional)
Alarm	Set points with adjustable delays
Display	80 Character Backlit LCD
Outputs	0-5Vdc instantaneous (1 each oxygen & combustibles) Optional 4-20mA isolated for each
Serial ports	RS232, RS422, printer
Contacts	1 A, 230V resistive load, SPST relay for each of the following as options. Set point alarms for Zero & Span Calibration Gas

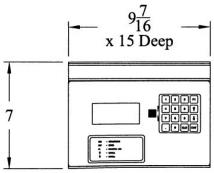
System Control Unit Nema 4



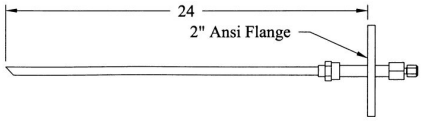
Sensor Enclosure



System Control Unit Panel Mount



Probe Assembly



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