



COMBUSTION CONTROL SYSTEM

PRODUCT BROCHURE

O2CX

IN-SITU COMBUSTION OPTIMIZATION MONITOR Flue Gas Oxygen & Combustibles Transmitter

Until now, in-situ measurements, used to tune boilers, were limited to O_2 only. Now, there is a compact in-situ probe for combustion optimization to measure both COe and O_2 simultaneously providing engineers an improved tool to lower excess air to previously unachieved levels, saving fuel costs.

- Real-time measurements
- Stable, long-life Zirconium sensor
- Low maintenance with easy access to sensors for fast and simple service
- Unique, heated solid electrolyte combustibles sensor
- Combustion optimization

In-Situ O₂/COe Combustion Monitor

In-situ, real-time readings for optimal fuel efficiency of boilers, furnaces, and kilns, with fast and simple service ability, and all at a tremendous value.

The COSA Xentaur O2CX is the ideal choice to optimize fuel efficiency on most combustion sources. It has a number of significant advantages over other oxygen transmitters.

The addition of our unique combustibles sensor allows the process to safely operate with a lower Excess Air ratio, which translates in to higher fuel efficiencies.

The O2CX Zirconium Oxide O_2 sensor has great accuracy and sensitivity below 10% oxygen and does not require dilution air like other competitors utilizing a Pellister sensor.

Zirconium Oxide O₂ Sensor

- Long life
- Fast response
- High stability
- Low energy consumption

Heated Solid Electrolyte COe Sensor

- High accuracy/sensitivity
- Stable even to 1% oxygen
- · No dilution air required
- Fast response
- Long life

Other Features

- Easy access to sensors
- Suitable for high dust/particulate applications
- High temperatures to 3100°F
- Probe lengths to 6'
- Optional auto calibration



O2CX Compact Model

O2CX Remote Control Model



O2CX Remote Control Model with AUTO-CAL



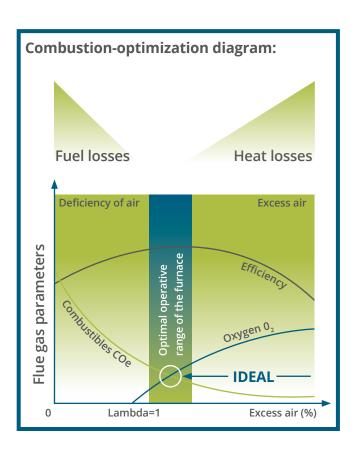
PU 420 AUTO-CAL Module for long term stability



O2CX High Temperature Model

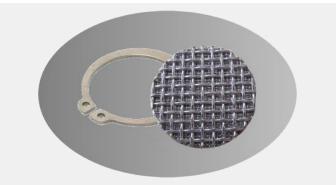
Save Energy & Fuel Consumption

Large Power Plants...Save millions \$ a year





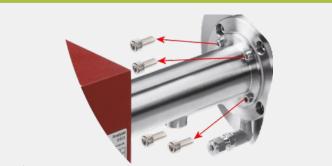
Minimal tools are needed to change sensors



Sensors are protected with sintered metal filter

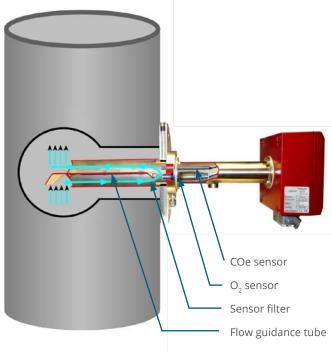


Purging system for particulate/dust applications



Only 4 screws to access the sensors





Technical Specifications

Measuring range:	0.1 to 25.0% Vol% O ₂ 0 to 1,000 ppm CO _e (option combustibles measurement)
Accuracy:	O_2 : ±0.2% or ± 5% of reading, whichever is larger COe: ±50 ppm or ±10% of reading, whichever is larger
Flange:	ANSI flange: Ø 230 mm / probe tube: Ø 60 mm, up to max. 13' (4.0 m) length or flange DN80 PN16
Flange:	DN65 PN6 flange: Ø 216 mm / probe tube: Ø 60 mm up to max. 13' (4.0 m) length or flange DN80 PN16
Flange temperature:	Min. +160 °F (71 °C) to max. +300 °F (149 °C) (condensation at the flange must be avoided)
Response time T90:	<10 seconds
Analog outputs:	2 x current loop 4-20 mA, with galvanic isolation linearized for both 0 to 25% O_2 and 0 to 1,000 ppm COe (user definable settings in 0.5% steps are possible)
Digital output:	Galvanic isolated RS 485 (with Modbus protocol)
Power supply:	18 to 24 Vdc (for model O2CX), 90 to 100 W, 100 to 240 Vac (for model O2CX RT and HT) max. 100 W
Electronic of transmitter:	With local microprocessor, display and 4 push-buttons
Calibration inlet:	With test gas fitting for 6/4 mm tube cal. gas supplied manually or automatically by pneumatic unit PU 420
INLET – Purging System for high particulate/dust application:	Min. 87 PSI – 116 PSI (6 – 8 bar) compressed air with quick connector for 8 mm tube
Ambient temperature of electronics:	-70°F to 130°F (-57°C to 55°C)
Enclosure:	Die cast aluminum, 6.3" x 6.3" x 2.4" and probe tube, Ø 2" $$
Protection class:	IP 65
Weight:	7.7 lbs (3.5 kg) (without probe and flange

Options

Options Include:

Remote or compact transmitter, optional blow down feature, customized probe option, O_2 and optional COe

COe Measurement

PROBE TUBE AND SENSOR CHAMBER BLOW BACK SYSTEM. Compressed air is required!! Blow back timing and duration are user definable. Recommended for applications with high particulates, such as coal-fired power plants.

Automatic calibration for span and offset, using pneumatic unit PU 420.

Application with high temperatures up to approx. 3,100°F (1,705°C) with ceramic tube and ejector (model HT).

Remote control and display unit (max. cable length = approx. 33' (10 m) – model RT) for applications with ambient temperature >120°F (49°C)





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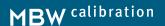
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