

## PRODUCT DATA SHEET

# WDG 1200/INSITU and WDG 1210/INSITU

## Reliable flue gas analyzers using industry-proven zirconium oxide sensor technology

The WDG 1200/integral electronics Insitu and the WDG 1210/remote electronics Insitu are rugged, reliable flue gas analyzers for net oxygen that use industry-proven zirconium oxide sensor technology. The controller features precision temperature control for optimum stability and over-temperature protection. Internal diagnostics, Modbus interface and a 4-20 mA output are standard. The unique sensor design allows the entire sensor assembly, including the heater, to be removed without disturbing the outer protection tube which remains in the process. This makes field service fast and easy and, because there is no need to return the probe to the factory for repair, there is no expensive downtime.

### Reliable flue gas analyzer

Zirconia oxide oxygen (O<sub>2</sub>) sensor provides years of service in the most difficult of applications with minimal maintenance.

### Unique sensor design

Internal probe sensor and components are field serviceable without the need to remove from the process flange.

### Versatile user interface

Analog output, Modbus communication, and diagnostic fault indication as standard construction.



## KEY BENEFITS

- Fast and easy field service due to unique sensor design
- No expensive downtime
- Optimum stability and over-temperature control
- 0.4 to 3.0 m probe lengths
- 2 inch NPT (M) to 6 inch flange connection

## APPLICATIONS

- Combustion efficiency and control
- Gas, oil, or coal-fired boilers
- NOx reduction systems
- Shipboard boilers
- Excess air measurement
- Pollution control

## KEY MARKETS

- Bio-fuel boilers
- Package boilers
- Power generation
- CCGT
- Petrochemicals
- Process industries
- Pharmaceuticals
- Incineration furnaces

**PERFORMANCE SPECIFICATIONS**

<b>Display type</b>	Single-line four-digit LED
<b>Parameters</b>	O <sub>2</sub> concentration, calibration gas concentration, cell temperature, fault messages, cell/thermocouple information
<b>Analog outputs</b>	Single channel isolated 0 to 20; 4 to 20 mA menu selectable; 500 Ω max
<b>Ranges</b>	Selectable range 0 to 1% up to 0 to 25% v/v O <sub>2</sub>
<b>Serial output</b>	RS485 Modbus protocol (two-wire, half-duplex)
<b>Alarm relays</b>	Single pole changeover 2A at 30 V AC or DC.
<b>Alarms</b>	High/Low customer selectable, system fault, maintenance / Cal. in progress
<b>Fault indications</b>	LED indication and error codes
<b>Calibration</b>	Option to track or hold
<b>Calibration type</b>	Manual
<b>Power supply</b>	85 to 264 VAC; 48 to 62 Hz
<b>Power rating</b>	250 VA
<b>Max. Distance to probe</b>	985 ft (300 m)
<b>Operating temperature</b>	-5°F to 160°F (-20°C to 71°C)
<b>Enclosure</b>	NEMA 4X/IP65
<b>Weight</b>	5.95 lb / 2.7 kg
<b>Compliance</b>	Conforms to EN 50 081, EN 50 082, EN61010-1

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