

## 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

### SALES, SERVICE & MANUFACTURING

#### USA - Pennsylvania

150 Freeport Road  
Pittsburgh PA 15238  
Tel: +1 412 828 9040  
Fax: +1 412 826 0399

#### USA - Delaware

455 Corporate Blvd.  
Newark DE 19702  
Tel: +1 302 456 4400  
Fax: +1 302 456 4444

#### Canada - Alberta

2876 Sunridge Way NE  
Calgary AB T1Y 7H9  
Tel: +1 403 235 8400  
Fax: +1 403 248 3550

### WORLDWIDE SALES AND SERVICE LOCATIONS

#### USA

Tel: +1 713 466 4900  
Fax: +1 713 849 1924

#### Brazil

Tel: +55 19 2107 4100

#### France

Tel: +33 1 30 68 89 20  
Fax: +33 1 30 68 89 99

#### Germany

Tel: +49 2159 9136 0  
Fax: +49 2159 9136 39

#### India

Tel: +91 80 6782 3200  
Fax: +91 80 6780 3232

#### Singapore

Tel: +65 6484 2388  
Fax: +65 6481 6588

#### China

Beijing  
Tel: +86 10 8526 2111  
Fax: +86 10 8526 2141  
Chengdu  
Tel: +86 28 8675 8111  
Fax: +86 28-8675 8141  
Shanghai  
Tel: +86 21 5868 5111  
Fax: +86 21 5866 0969



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