

Continuously measure O₂ and humidity at high temperatures — no sampling device needed, reducing OPEX.



Enhance productivity while reducing operational expenses.

Delivers continuous oxygen and humidity monitoring under high temperatures—without a sampling device—helping reduce OPEX and enhance operational efficiency.

ZR802G

- **Sensor Self-diagnosis**

Auto/Semi-auto diagnosis of sensor deterioration without calibration gas

- **Enhancement**

Digital communications (HART 7, MODBUS), Data logging

- **Intuitive Operation**

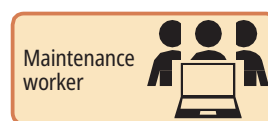
Interactive HMI LCD touchscreen for easy operation

- **Reliability**

Interactive HMI LCD touchscreen for easy operation

Creating new value with industrial IOT (IIOT)

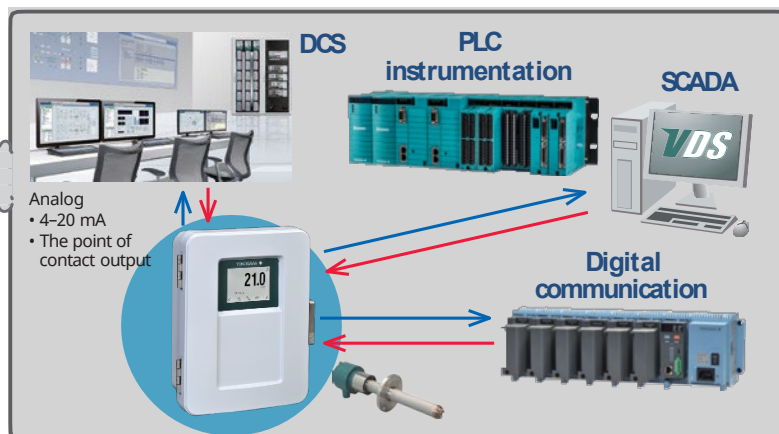
Most suitable for monitoring the oxygen concentration of combustion gases in boilers, various industrial furnace and combustion devices, or for the control of low-oxygen combustion.



Maintenance worker

- Daily life management
- Self-diagnosis information
- Detailed information at the time of the abnormality

Remoteness Support



CLOUD
(Grandsight / eServ)

Gateway way
Radio (including the LTE)

Specification

Measurement Object	Oxygen analyzer: Oxygen concentration in combustion exhaust gas and mixed gas Humidity Analyzer: Water vapor (in vol%) in mixed gases (air and water vapor)
Measurement System	Zirconia System (Detector ZR22G)
Measurement Range	O ₂ : 0.01–100 vol% H ₂ O: 0–100 vol% Mixture ratio: 0–1,000 kg/kg
Analog Output	Out put points; Two points (input-output isolation) Out put signal; 4 to 20 mA DC linear or log can be selected (maximum loadresistance 550 Ω) Out put range; O ₂ : Any setting between 0 to 5 through 0 to 100 vol% O ₂ H ₂ O: Any setting between 0 to 25 through 0 to 100 vol% H ₂ O
Analog Input	Input points; one point (for pressure compensation of O ₂ or temperature input of high temp humidity) Input signal; 4 to 20 mA DC (input resistance 250 Ω)
Contact Output	Contact output points; Four points (one is fail-safe, normally open) Contact capacity; 30 VDC 3 A or 250 VAC 3 A (load resistance) Action; Fault, High-high alarm, High alarm, Low-low alarm, Low alarm, Maintenance, etc.
Contact Input	Contact input points; Two points Contact capacity; Off-state leakage current 3 mA or less Action; Calibration gas pressure decrease alarm, Range switching, External calibration start, etc.
Digital Communication	HART7 (AO1, 250 to 550 Ω) Ethernet (Modbus TCP) RS-485 (Modbus RTU)

Calibration	Calibration method; Zero/Span calibration (Either zero or span can be skipped) Calibration mode; Auto, Semi-auto, Manual
Construction	Waterproof construction, NEMA/CSA TYPE 4X
Ambient Temperature	-20 to +55°C
Power Supply Voltage	100 to 240 VAC 50/60 Hz

Characteristics

Repeatability	O ₂ : ± 0.5% F.S. (0 to 5 vol% O ₂ or more and less than 0 to 25 vol% O ₂ range) O ₂ : ± 1% F.S. (0 to 25 vol% O ₂ or more and up to 0 to 100 vol% O ₂ range) H ₂ O: ± 1 vol%H ₂ O (Sample gas pressure 2kPa or less)
Linearity	O ₂ : ± 1% F.S. (0 to 5 vol% O ₂ or more and less than 0 to 25 vol% O ₂ range) O ₂ : ± 3% F.S. (0 to 25 vol% O ₂ or more and up to 0 to 50 vol% O ₂ range) O ₂ : ± 5% F.S. (0 to 50 vol% O ₂ or more and up to 0 to 100 vol% O ₂ range) H ₂ O: ± 2 vol%H ₂ O (sample gas pressure: within ± 0.49 kPa) H ₂ O: ± 3 vol%H ₂ O (sample gas pressure: 2 kPa or less)
Drift	O ₂ : Both zero and span ± 2% F.S. /month H ₂ O: Both zero and span ± 3 vol%H ₂ O /month
Response Time	Response of 90% within 5 seconds.

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