



# Contribute to OPEX reduction

ZR802G brings advantages such as self-diagnosis or reduced maintenance requirement, which promotes OPEX reduction, with user-friendly operation and inherited product reliability in addition to some improved functions to satisfy customer needs.

## 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

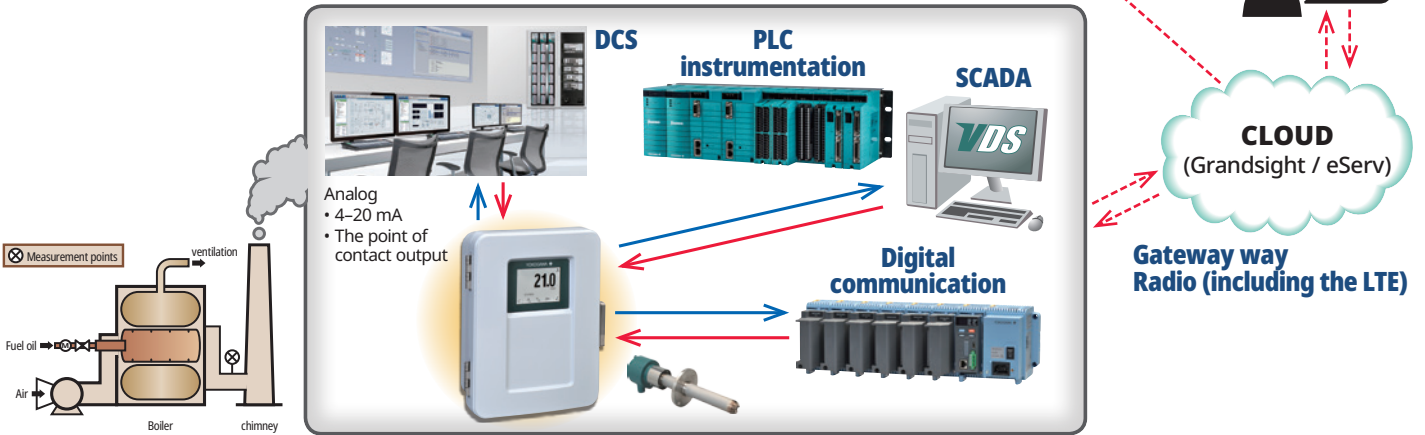
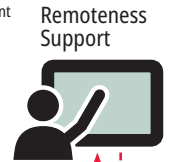
Trend-graph proves measurement stability at calibration

# Creating new value with industrial IOT (IIOT)

Manage even a large-scale plant, the subdivided plant with the minimum staff



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



## Specification

<b>Measurement Object</b>	Oxygen analyzer: Oxygen concentration in combustion exhaust gas and mixed gas Humidity Analyzer: Water vapor (in vol%) in mixed gases (air and water vapor)
<b>Measurement System</b>	Zirconia System (Detector ZR22G)
<b>Measurement Range</b>	O <sub>2</sub> : 0.01-100 vol% H <sub>2</sub> O: 0-100 vol% Mixture ratio: 0-1.000 kg/kg
<b>Analog Output</b>	Out put points; Two points (input-output isolation) Out put signal; 4 to 20 mA DC linear or log can be selected (maximum load resistance 550 Ω) Out put range; O <sub>2</sub> : Any setting between 0 to 5 through 0 to 100 vol% O <sub>2</sub> H <sub>2</sub> O: Any setting between 0 to 25 through 0 to 100 vol% H <sub>2</sub> O
<b>Analog Input</b>	Input points; one point (for pressure compensation of O <sub>2</sub> or temperature input of high temp humidity) Input signal; 4 to 20 mA DC (input resistance 250 Ω)
<b>Contact Output</b>	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.
<b>Contact Input</b>	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.
<b>Digital Communication</b>	HART7 (AO1, 250 to 550 Ω) Ethernet (Modbus TCP) RS-485 (Modbus RTU)

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

## Characteristics

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

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Represented by:

ANA-01E

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[Ed:01/b]

Printed in Japan, 103(KP)