

## Low Concentration Zirconia Oxygen Analyzer OX400

The OX400 is a highly-accurate, reliable, low-concentration zirconia oxygen analyzer capable of measuring a wide range of concentrations from low concentration range of 0-10 ppm up to high concentration range of 0-100 vol%O<sub>2</sub>. The zirconia sensor, produced using a Yokogawa original new thin-film electrode forming technology, is small but has features of high-speed response and long life. The OX400 is suitable for applications including oxygen concentration control in semiconductor manufacturing, ambient control in flat panel display (FPD) manufacturing, and oxygen concentration control in glove boxes and drying furnaces.



### FEATURES

- Long life and high-speed response
  - Three times longer lifespan (compared with Yokogawa's earlier products)
  - A cylindrical sensor, which makes it easy to switch gases to be measured, assures a high-speed response.
- High performance and high reliability
  - Superior repeatability and linearity even at low oxygen concentrations
  - Either pump or aspirator sampling can be selected for applications.
  - Compliant with CE, C-Tick, cCSAus standards
- Various built-in functions
  - Multi selector, auto range, partial range, pump on/off, and analog output selection
  - Self-diagnosis functions: Sensor error, heater temperature error, temperature sensor burnout, and sensor resistance value error
- Improved visibility and operability
  - Large LED display
  - Easy-to-use large buttons
- Superior maintainability
  - The sensor can be replaced on-site.
  - Compact and lightweight for easy installation

### SPECIFICATIONS

- Measurement object: Oxygen in inert gases
- Sampling method: Select from pump, aspirator, or no suction device
- Sample gas conditions:
  - Flow rate at the sensor: 200 ± 25 ml/min
  - Temperature: 0-50 °C (no condensation)
  - Pressure: 0-300 PaG
- Measurement range: 0-10 ppmO<sub>2</sub> to 0-100 vol%O<sub>2</sub>
- Minimum resolution: 0.01 ppm
- Display: Oxygen concentration (digital, four digits)  
Setting items, alarm/error number
- Unit: %, ppm
- Analog output: 2
  - Primary: 4 to 20 mA DC
  - Secondary: Select from 0-1, 0-5, 0-10 V DC
- Output range:
  - Auto:
    - 0-10/100/1000 ppm, 0-1/10/100%O<sub>2</sub> (automatic switching)
    - 0-□0/□00/□000 ppm, 0-□/□0/100% O<sub>2</sub> can be set (□ is any integer from 1 to 9).
  - Fixed:
    - Select from 0-10/100/1000 ppm, 0-1/10/100%O<sub>2</sub>
- Communication: RS-232
- Power supply:
  - Select from 100 - 120 V AC or 220 - 240 V AC, 50Hz or 60 Hz
- Power consumption: 200 VA max. (100 - 120 V AC)  
400 VA max. (220 - 240 V AC)
- Dimensions: 213 (W) × 132 (H) × 375 (D) mm
- Weight: Approx. 5 kg

### CHARACTERISTICS

- Repeatability: ±1% FS
- Linearity: ±2% FS  
±3% FS (0-100 ppm or less)
- Response time: within 10 sec (0-1 vol%O<sub>2</sub> or more),  
within 30 sec (less than 0-1 vol%O<sub>2</sub>)
- Drift: ±2% FS / week

Contact us

To Yokogawa Japan:

<https://www.yokogawa.com/an/an-inquiry-111en.htm>

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