



C E Global quality standard



ments from facility to process usage.

The latest model of dissolved oxygen monitor HD-960LR

- Dissolved oxygen concentration can be measured even with the chemical conditions below.
 - Ammonia concentration is 1% or lower. sample temperature is 25 °C ±2 °C
 - ✓ Organic solvent with boiling point higher than water
- Able to measure dissolved oxygen concentrations of more types of chemicals used in semiconductor processes.



Comparison with previous models

	Latest model	Previous models	
	High flow rate and long life	High flow rate (Sample to circulate)	Low flow rate (Sample to drain)
Model	HD-960LR	HD-960L-M	HD-960
Sensor unit dimensions	W170 (200) x H95 x D135	W120 (150) x H95 x D108	W87 (117) x H131 x D94
Flow rate	600 - 2000 mL/min (Sensor membrane: 25 μ m)	200 - 2000 mL/min	15 - 200 mL/min
	400 - 2000 mL/min (Sensor membrane: 50 μ m)	(Sensor membrane: 25 μ m/50 μ m)	(Sensor membrane: 25 μ m/50 μ m)
Temperature	20 - 60 ℃	20 - 60 ℃	10 - 45 ℃
Pressure	0 - 0.2 MPa	0 - 0.2 MPa	0 - 0.1 MPa
Response speed	30 sec (90%) @400 mL/min	30 sec (90%) @400 mL/min	30 sec (90%) @200 mL/min
Sample	Ammonia concentration is 1% or lower,	Pure water	Pure water
	sample temperature is 25 $^{\circ}$ C \pm 2 $^{\circ}$ C	Low concentration HF	Low concentration HF
	Organic solvent with boiling point higher	(5700 ppm or less)	(5700 ppm or less)
	than water.		
Equipment configuration	Converter: HD-960LR	Converter: HD-960L-M	Converter: HD-960L
	Sensor unit: DO-120	Sensor unit: DO-110	Sensor unit: DO-100
	Bottle unit: DO-120-B	Sensor: 5611	Sensor: 5600
	Sensor: 5622	Connection cable: CK-05PS (5 m)	Connection cable: CK-05PS (5 m)
	Connection cable: CK-05PS (5 m)		
	Relay cable: CK-01DO (1 m)		

Measurement data (In-house reference data)

Ammonia

Measurement condition > Sample: Ammonia (28%)

Membrane: 25 μm

▼ Temperature: Room temperature

Conduct regular sensitivity check by measuring atmospheric air

Measurement result

Abnormal measurement tends to occur within 5 days of operation for the previous models. The latest model is able to achieve stable measurements for about 480 days.

Organic solvent

Measurement condition

Sample:Organic solvent

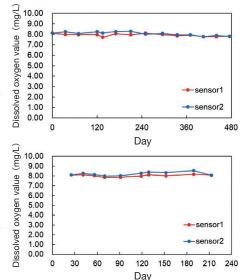
 \checkmark Membrane: 50 μ m

▼ Temperature: 60 °C

Conduct regular sensitivity check by measuring atmospheric air

Measurement result

Abnormal measurement tends to occur within 5 days of operation for the previous models. The latest model is able to achieve stable measurements for about 210 days.





The HORIBA Group adopts IMS (Integrated Management System) which integrates Quality Management System ISO9001, Environmental Management System ISO14001, and Occupational Health and Safety Management System ISO45001.

We have now integrated Business Continuity Management System ISO22301 in order to provide our products and services in a stable manner, even in emergencies



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