



OXIX[®] DISSOLVED OXYGEN ANALYZER
FOR CONTINUOUS MEASUREMENT OF DISSOLVED OXYGEN



SENSOR WITH MINIMAL MAINTENANCE

The Oxix transmitter is a unique dissolved oxygen measurement system with an optical sensor that communicates with a state-of-the-art electronic converter. No other system for measurement of dissolved oxygen can compare with the features and advantage of the Oxix®.

Oxix® is ideal for the measurement of dissolved oxygen in process and wastewater. The Oxix® sensor has no membrane to change, contains no chemicals to foul, and requires no calibration.

When the sensor is submerged into water, the converter automatically cleans the sensor's optical window, and thus keeps the system practically maintenance free.





SUPERIOR SENSING TECHNIQUE

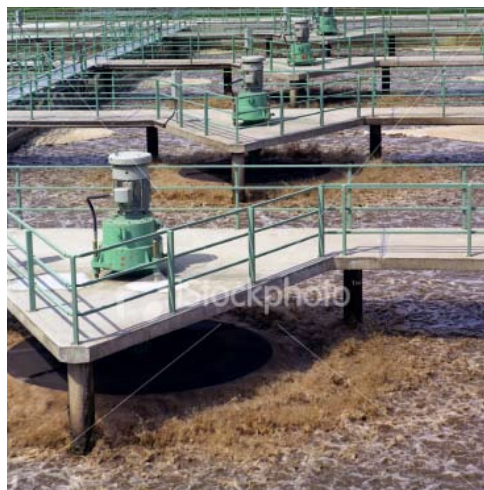


The Oxix® optical sensor does not deplete oxygen. The sensor contains a light source with a specific wavelength that shines on the back of a membrane containing a special compound immobilized in a gel matrix.

When the light hits the gel, a fluorescence process is initiated and the sensor detects the fluorescence which is proportional to the amount of dissolved oxygen. The resulting signal is sent to the converter for processing and calculation of a proportional, analog 4-20 mA output signal.



3



The sensor has a measuring range of 0 – 25 mg/l, with a resolution of 0.01 mg/l and an accuracy of <1 % or 0.02 mg/l. The temperature range is 0 - 50°C.

The digital signal in the Oxix® sensor is an advanced communication technology that allows cable lengths up to 300 m between sensor and converter.

MULTI-TASKING DISPLAY

When a sensor is connected to the Oxix® converter, the measurement is immediately displayed in the range 0 – 25 mg/l with a resolution of 0,01 mg/l.

The Oxix® display contains a built-in datalogger with a capacity of 160.000 stored and time-stamped measurements. The values can be transferred to a PC in csv file format via the display's USB port or by using Bluetooth®.



CONVERTER WITH COMMUNICATION



The Oxix® converter is easy to use with a logical menu structure and a mobile-like user interface.

Oxix® USB and Bluetooth connections are used for transferring set-up configurations, software updates or to transfer data from the internal datalogger to a standard PC.

The Oxix® converter and display are related to the MJK SuSix® (turbidity and suspended solids transmitter) and the MJK MagFlux® (electromagnetic flow meter) converters and displays. This series of MJK instruments has a 4-20 mA current output, two relays for controlling or alarms, and a digital input for activation of flushing cycle (Oxix), wiper cycle (Susix) or to reset an alarm. The alarms are displayed in pop-up windows and are concurrently stored in the Oxix® converter's alarm log.

Oxix® can operate in networks with other Oxix® or MJK units, where one display can be shared by up to 4 converter-sensor combinations.

Oxix® uses Modbus communication for direct connection to a PLC.

Oxix® Sensor	
Measuring range	Dissolved oxygen 0 – 25 mg/l (0-25 ppm)
Resolution	0,01 mg/l
Principle of operation	Optical fluorescence (luminescence) @ 475 nm wavelength
Response time	90% within 60 secs
Dimensions	50 mm (diameter) × 130 mm
Materials	Epoxy, silicone and polyurethane
Cable	6 x 0,34 mm ² , Ø 8,0 mm
Cable length	Standard 10 m

Oxix® Converter	
Input	RS 485
Analog output	Active 4 - 20 mA, galvanically isolated (max. 800 Ω)
Digital output	One potential-free, electro-mechanical relay (max. 50 V DC / 1 A) One optically isolated MOSFET relay (max. 50 VAC / V DC / 120 mA)
Digital input	For activation of flushing and resetting alarms
Communication	Modbus® RTU-mode, 9600 baud, 2-wire RS 485, slave-mode
Interface	RS 485 for connection to display unit or PLC
Power supply	10-30 V DC or 24 V AC, 50 / 60 Hz ± 10 % or 115 V AC, 50 / 60 Hz ± 10 % or 230 V AC, 50 / 60 Hz ± 10 %
Power consumption	10 W
Materials	Polycarbonate, glass reinforced
Enclosure rating	IP 67

MJK Automation A/S
Byageren 7
2850 Nærum
Denmark
Tel.: +45 45 56 06 56
Fax: +45 45 56 06 46
www.mjk.dk
mjk@mjk.dk

MJK Automation AS
Prins Chr.Augusts Plass 1
1530 Moss
Norway
Tel.: +47 69 20 60 70
Fax: +47 69 20 60 71
www.mjk.no
mjk@mjk.no

MJK Automation AB
Nytorget 4
S-66123 Säffle
Sweden
Tel.: +46 53 31 77 50
Fax: +46 53 31 38 11
www.mjk.se
kontoret@mjk.se

MJK Automation B.V.
Hoofdweg 667 A
2131 BB Hoofddorp
Holland
Tel.: +31 0251-672171
Fax: +31 0251-671951
www.mjk.com
mjknl@mjk.com

MJK Automation P/L
Unit 8/69 Acacia Road
Ferntree Gully 3156
Victoria Australia
Ph: + 61 3 9758 8533
Fax: + 61 3 9758 8633
www.mjk.com
mjkaus@mjk.com

MJK North America Inc.
37 Sherwood Terrace, #126
Lake Bluff IL 60044
USA
Toll Free: +01 877-655-5465
+01 (877-MJK-LINK)
Local: +01 847-482-8655
Fax: +01 847-482-8654
www.mjk.com
mjkusa@mjk.com