Process Optical Dissolved Oxygen Sensor with Modbus output MBRTU-PODO Version 2

SKU: MBRTU-PODO

Doc No: MBRTU-PODO-DS-EN-20

Introduction

MBRTU-PODO is Process Optical Dissolved Oxygen Electrode with optic technology is based on the proven method whereas oxygen concentration is determined by the luminescent quenching of a dye embedded on the sensor surface. Unlike polarographic or galvanic sensors, this optical sensor does not require filling solutions nor a “warm-up” time. The electrode comes with 1/2” NPT threads, a durable stainless steel body and is submersible. Output is Modbus RTU for easily integrating with any PLC, controller, SCADA, BMS or IoT gateway.

- Affordable, complete electrode system
- Fully documented RS485 output for existing PLC/controllers/monitors
- No electrolyte solution to replenish
  Replaceable sensor cap with >2 year life expectancy
- No calibration or replacement sensor cap for at least 1 year in most applications
- Saltwater compensation
- On-probe pressure sensor for compensation
- Sample flow not necessary for measurement accuracy
- Standard ModbusRTU output;

Typical Applications

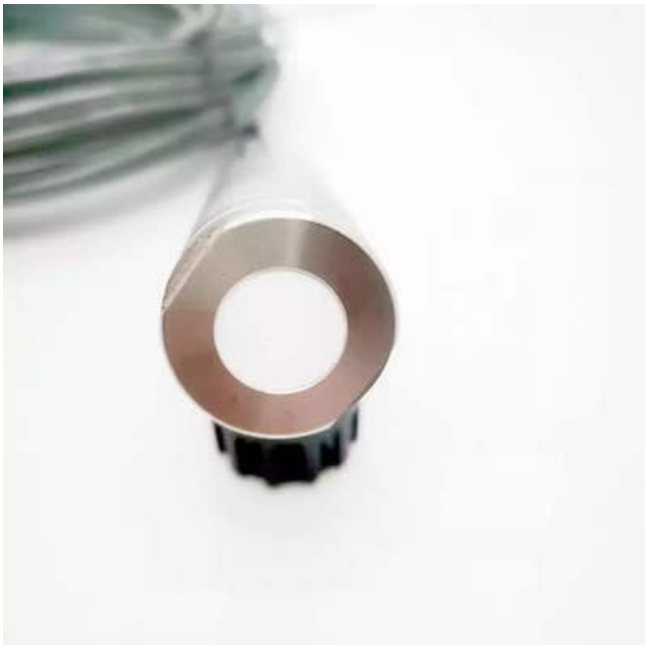
MBRTU-PODO is used in monitoring of Dissolved oxygen in:

- Waste water;
- Aquaculture;
- ...





with Protective cover



Sensor cap



with 4-20mA converter

Specification

ODO SENSOR SPECIFICATION	
Sensing Technology	Optical sensor
Measuring range	0 - 20 ppm or 0-200% Saturation
Resolution	0.01 ppm, 0.1 oC
Accuracy	+/- 0.3% FS, +/- 0.3 oC
Response Time	T90 < 50s
Sensor cap life	> 1 year under normal condition
Working temperature	0 .. 50 oC
Process connection	1/2" NPT
Wetted parts	316SS
Sensor Cable	10m standard
Rating	IP68
Sensor Dimension	D30 x 120 (mm)
Sensor net weight	< 350 grams
Output	RS485, ModbusRTU protocol, 9600, 8, 1, None
Power supply	12..24VDC, avg. < 50mA
OPTIONAL CONVERTER TO 4-20mA	
Size	83*58*33.5mm

Output	4-20mA
Supply	12-24VDC, < 20mA

Ordering Code

Item code	**Descriptions**
MBRTU-PODO-03	PROCESS OPTICAL DISSOLVED OXYGEN SENSOR IP68, 1/2" NPT SUBMERSIBLE, MODBUSRTU RS485 OUTPUT, 12-24VDC, 10M CABLE
Accessories	
RS485-FM12-USB-1	RS485 FEMALE M12 4-PIN, CODING A TO USB CABLE WITH POWER ADAPTER 12VDC/2.0A FOR CONFIGURATION
** Configuration cable for pH sensor, Windows' software is free. Contact our sales for more information.*	

⚠ Link to download datasheet:

⚠ Link for manual:

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