

# Process Free Chlorine Sensor with Modbus output MBRTU-FCL

SKU: MBRTU-FCL

Doc No: MBRTU-FCL-DS-EN-10

## Introduction

MBRTU-FCL Free Chlorine Sensor is an excellent choice for continuous measurement of free (or residual) chlorine in swimming pools, spas, industrial applications, or dirty/colored samples where colorimetric methods are inadequate. This electrode utilizes 2-electrode amperometric measurement technology and the measured chlorine concentration is compensated by an internal temperature sensor. ModbusRTU output on RS485 allow easily integrate into any Monitoring or Control systems.

- 1 Affordable, complete, free chlorine electrode system;
- 2 Long life with replaceable membrane and refillable electrolyte;
- 3 Auto temperature-compensated output;
- 4 1/2" NPT fittings for easy installation in pipe or our available flow cell;
- 5 Factory calibrated, no zero calibration required;
- 6 Standard ModbusRTU output;
- 7 Plug & Play.

## Typical Applications

MBRTU-FCL can be used to monitor or control the residual chlorine in:

- 1 Swimming pools;
- 2 SPAs;
- 3 Industrial Process;
- 4 Municipal Water;
- 5 ...

PROCESS FREE CHLORINE SENSOR WITH MODBUS OUTPUT  
MBRTU-FCL



MBRTU-FCL-H1.PNG

MONITORING FREE CHLORINE IN WATER



MBRTU-FCL-H2.PNG

## FCL TRANSMITTER, DIN-RAIL MOUNT



## Specification


Sensing Technology	Two-electrode ampero-metric technology with gas permeable membranes (replaceable)
Measuring range	0-10mg/L or 0-20mg/L
Accuracy & Resolution	+/- 0.1 mg/L
Repeatability	+/- 0.05 mg/L (25 oC)
Response Time	T90 < 90s (25 oC)
Working Condition	0 .. 50 oC with pH = 5 .. 9
Working Pressure	0 .. 15 psig
Flow range	30 .. 60 L/h or 0.6 .. 1.3 cm/s
Output	RS485 ModbusRTU
Power supply	9..36VDC, avg. < 200mA
Conditioning	New, first start-up: at least 4hours Restart-up: < 30 min.
Calibration	One Point - Manual with DPD
Interferences	ClO <sub>2</sub> , Ozone, Bromine Cyanuric Acid compatible
Process connection	1/2" NPT
Wetted parts	PVC, Silicone, ABS, PES Silver-Silver Halide/Platinum
Sensor Cable	6m with BNC connector
Rating	IP68
Sensor Dimension	D21.3 x 219 (mm)

Sensor net weight	< 200 grams
Warranty	1 year for probe, membrane for 03 months

## Ordering Code

Item code	Descriptions
MBRTU-FCL-01	PROCESS RESIDUAL CHLORINE SENSOR WITH TEMPERATURE COMPENSATION, 0-10MG/L, IP68, 1/2" NPT SUBMERSIBLE, RS485 MODBUSRTU OUTPUT, 9-36VDC
MBRTU-FCL-02	PROCESS RESIDUAL CHLORINE SENSOR WITH TEMPERATURE COMPENSATION, 0-20MG/L, IP68, 1/2" NPT SUBMERSIBLE, RS485 MODBUSRTU OUTPUT, 9-36VDC
Replaceable spare-parts	
RC66-MEM1	CHLORINE SENSOR MEMBRANE RC66
RF0CR2-125	CHLORINE INTERNAL FILLING GEL RC66, 125 ML
* Configuration cable for pH sensor, Windows' software is free. Contact our sales for more information.	

 Link for full datasheet: <https://filerun.daviteq.com/wl/?id=tqQNQnXedUbYO3Xd32JMg3ZEPSiC8Rn5>

 Link for manual:

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Daviteq Technologies Inc



[www.daviteq.com](http://www.daviteq.com)



[info@daviteq.com](mailto:info@daviteq.com)