

# Water Quality Analysis Dissolved Oxygen Sensor

## WS102-DOS

WS102-DOS is a smart water quality analysis Dissolved Oxygen Sensor, which can be used in tap water, sewage treatment, wastewater treatment, aquaculture and environmental monitoring, etc.

At the same time built-in temperature detection, measuring range 0 ~ 60 °C. Signal output mode supports RS485(Modbus RTU) and 4~20mA.



### Features & Benefits

System Parameter	
Power supply	DC10-30V(Recommend 12V)
Pressure range	0~300KPa
Shell material	PC+316L
Cable length	5m or customize
Protection grade	IP68
Weight	0.5kg(Without packaging)
Inspection Parameter	
Measuring Range	0~20mg/L
Resolution	0.01mg/L
Accuracy	±0.2%FS
Temperature range	0~60°C
Resolution	0.1°C
Accuracy	±0.3°C
Temperature compensation	Automatic
Output	RS485(Modbus RTU);4~20mA
Communication Protocol Basic Parameter	
Protocol	Modbus RTU
Data bits	8 bit



## Features & Benefits

Parity bit	No
Stop bit	1
Error Detecting Code	CRC
Baud Rate	9600bps(Default)

### Address Description

Name	Register Address	Data Type	Length	Description
Measurements	0x 00 01	Floating point	2	Storage location for measured value
Temperature	0x 00 03	Floating point	2	Storage location for measured temperature
Current output	0x 00 05	Floating point	2	Output current based on DO measurements
Warning	0x 00 07	Integer	1	00: Normal 01: Measurement exceeds the upper limit 02: Measurement exceeds the lower limit 03: Temperature exceeds the upper limit 04: Temperature exceeds the lower limit
Device address	0x 00 19	Integer	1	Default Value:1;1~254
Band Rate	0x 00 1A	Integer	1	0=2400 , 1=4800 , 2=9600(Default) 3=19200 , 4=38400
Restore factory	0x 00 1B	Integer	1	

### ✓ Electrode wiring

- Please follow the instructions carefully , the wrong wiring will damage the product completely.
- Please carefully check all the wiring in the system and confirm that the wiring is complete right before switch on the power.
- **Note: RS48SA line and RS48SB line are strictly forbidden to contact with the power supply line, otherwise the communication of the electrode will be permanently damaged.**



## Ordering Information

Model	Description
WS102-DOS	DISSOLVED OXYGEN SENSOR, 0~20MG/L, TEMP. MEASURING RANGE: 0~60°C, 5 METER CABLE, RS485 MODBUS, 10-30V POWER
	<b>Package List</b>
	1 x Product Unit
	1 x QIG