

## Water Quality Analysis Bromine Level Sensor

## **WS102-BRM**

WS102-BRM is a smart water quality Bromine Level Sensor, which can be used in industries such as industry, environmental protection, education, agricultural IoT. At the same time built-in temperature detection, measuring range 0  $\sim$  60 °C. Signal output mode supports RS485(Modbus RTU) and 4 $\sim$ 20mA.







### **Features & Benefits**

System Parameter				
Power supply	DC10-30V(Recommend 12V)			
Pressure range	0~300KPa			
Shell material	PC+316			
PH Range	1~12pH			
Cable length	5m or customize			
Protection grade	IP68			
Weight	0.5kg(Without packaging)			
Inspection Parameter				
Measuring Range	0.4~50000ppm			
Resolution	0.001ppm			
Accuracy	±1%			
Temperature range	0~60°C			
Resolution	0.1℃			
Accuracy	±0.3°C			
Temperature compensation	Automatic			
Output	RS485(Modbus RTU);4~20mA			
Communication Protocol Basic Parameter				
Protocol	Modbus RTU			
Data bits	8 bit			



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 ION/mV 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-BRM	BROMINE LEVEL SENSOR, 0.4PPM~79900PPM, TEMP. MEASURING RANGE: 0~60°C, 5 METER CABLE, RS485 MODBUS, 10-30V POWER
	Package List
	1 x Product Unit
	1 x QIG