MODBUS RTU

## Fluorescence Dissolved Oxygen Sensor Modbus protocol

## **MODBUS RTU Transmission Mode**

RTU mode format for each byte (11 bits):

Encoding system	8-bit binary
	Each 8-bit byte in the protocol contains two 4-bit hexadecimal characters (0-9,
	A-F)
	1 start bit
Bit per byte	8 data bits, the least significant bit is sent first
	No parity check bit
	1 stop bit
Baud rate	9600bps
Message example (little-endian format ABCD adjusts DCBA first, then parses) Factory default slave	
address 01	
Temperatur: 17.5℃	
Percentage: 95.8%	01 03 20 00 00 06 C4 70
DO Value: 8.72mg/L	01 03 0C 00 00 8D 41 83 5B 75 3F E8 88 0B 41 F6 6B
Get user calibration	01 03 22 00 00 04 4E 71
parameters	01 03 08 00 00 80 3F 00 00 00 00 9E 12
(K=1,B= <mark>0</mark> )	
Set user calibration	SEND: 01 10 22 00 00 04 08 00 00 80 3F 00 00 00 00 C5 9D
parameters	GET: 01 10 22 00 00 04 CB B2
(K=1,B= <mark>0</mark> )	
Get slave ID	FF 03 30 00 00 01 9E D4 Get address: 01
	FF 03 02 01 00 90 00
Set slave ID	Original address 01 after setting address 20
	01 10 30 00 00 01 02 14 00 99 53
	01 10 30 00 00 01 0E C9

## Notes:

01 03 21 00 00 02 CE 37

01: Address

03: Function Code

21 00: Starting Address00 02: No.of registers

CE 37: CRC