

RK500-09 multi-parameter water quality sensor adopts an integrated design and can measure up to 7 parameters at the same time. You can choose DO, COD, pH, ORP, EC/salinity, NH_4^+ , turbidity, etc. Using RS-485 output, Modbus-RTU communication protocol, data can be directly transmitted to the acquisition platform.

The multi-parameter water quality sensor is equipped with an automatic cleaning device, automatic cleaning interval time and number of automatic cleaning cycles can be set to adapt to the water quality of different degrees of cleanliness. The automatic cleaning device can effectively clean the surface of the sensor, prevent the adhesion of microorganisms, and greatly reduce the maintenance cost. Each sensor is equipped with a quick-plug waterproof connector, which is easy to disassemble and assemble.

The sensor protection cover at the front is used to protect the internal sensor from damage. There are slots around the protection cover, which can effectively prevent large suspended particles and biological damage to the sensor probe, while not affecting the accuracy of measurement.

FEATURES

- Modbus/RTU communication protocol
- Automatic cleaning device
- Lower maintenance costs
- Integrated design
- Multiple parameters optional
- 7 parameters (including temperature) can be measured at the same time.



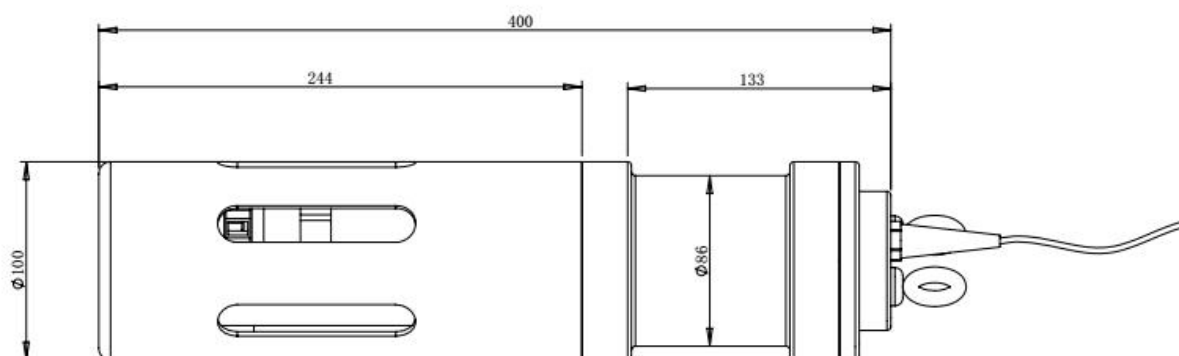
SPECIFICATIONS

Dissolved oxygen sensor			
Measuring range	0~20mg/L		
Accuracy	±0.4mg/L		
Resolution	0.01mg/L		
Turbidity sensor			
Measuring range	0~100NTU	0~1000NTU	
Accuracy	±3% or ±2NTU	±5% or ±3NTU	
Resolution	0.1NTU		
EC / salinity sensor			
Measuring range	0~5000uS/cm	0~200mS/cm	0~70PSU
Resolution	1uS/cm	0.1mS/cm	0.1PSU
Accuracy	±1.5% F.S.		
COD sensor			
Measuring range	COD		Turbidity
	0~200mg/L equiv. KHP		0~100NTU
	0~500mg/L equiv. KHP		0~200NTU
Accuracy (COD)	±5%F.S.		
Resolution (COD)	0.1mg/L		
Accuracy (Turbidity)	±5%F.S.		

Resolution (Turbidity)	0.1NTU	
pH sensor		
Measuring range	0~14pH	
Accuracy	±0.1pH	
Resolution	0.01pH	
ORP sensor		
Measuring range	-1500mV~+1500mV	
Accuracy	±6mV	
Resolution	1mV	
NH4+ sensor		
Measuring range	0~100mg/L	0~1000mg/L
Accuracy	±10% or ±2mg/L	
Resolution	0.1mg/L	
Temperature		
Measuring range	0~50℃	
Accuracy	±0.5℃	
Resolution	0.1℃	
Other Information of Multi-parameter sensor		
Output	RS-485(Modbus/RTU)	
Cleaning method	Automatic cleaning	
Power consumption	5W@12V	
power supply	12VDC±5%	
Installation method	Submerged installation	
Shell material	POM and 316L, default POM	
Cable length	5m(default), other lengths can be customized	

DIMENSION

Unit:mm



Note: Use lifting rings or pipe threads to install the sensor to avoid direct stress on the cable. The sensor connector is M16-5 cores male waterproof connector.

Revision time	Reviser	Current Version	Remarks
20250425	Lee	V5.0	