



# RK500-06 ORP Sensor

## Overview

RK500-06 ORP Sensor uses platinum electrodes, with a measurement range of -1500mV to +1500mV, a resolution of 0.1mV, built-in signal isolation, strong anti-interference ability, and an IP68 protection level design. It can work stably in liquids for a long time. Suitable for harsh environments such as sewage treatment, chemical industry, aquaculture, etc.

## Features

- On-line & real-time monitoring
- Platinum ring electrode
- High accuracy
- Simple operation and high reliability
- Internal signal isolation, strong anti-interference
- Widely power supply(7-28VDC)
- Probe can be used under water (IP68)
- Submerged mounting bracket is optional

## Applications

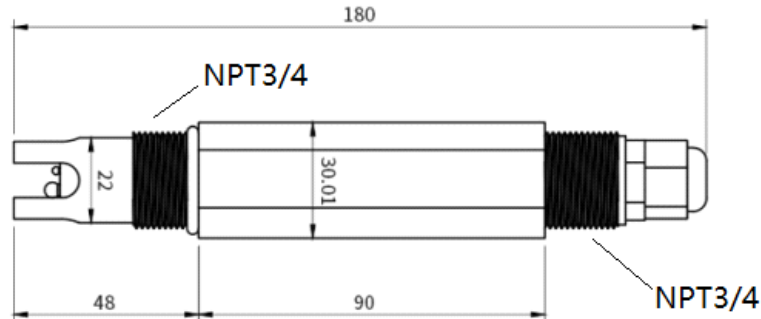
- Environmental protection
- Water quality monitoring
- Aquaculture
- Biochemistry
- Sewage treatment
- Industrial wastewater treatment
- Pharmaceutical
- Chemical

## Technical Parameter

Item	Technical Specification
Measurement principle	Electrochemical(platinum ring)
Range	-1500mV-+1500mV
Resolution	0.1mV
Accuracy	±1mV
Supply	7-28VDC
Response time	5s ( 90% ) ,14s ( 98% )
Output	4-20mA & RS485 at the same time
Operating environment	-5-+60℃ (<0.6MPa)
Maintenance	Every 1 months to clean the electrode ,every 6 months calibrated
Power consumption	<0.4W
Ingress protection	IP68
Storage	10-60℃ @20%-90%RH
Cable length	5m default, customizable

## Dimension

Unit:mm

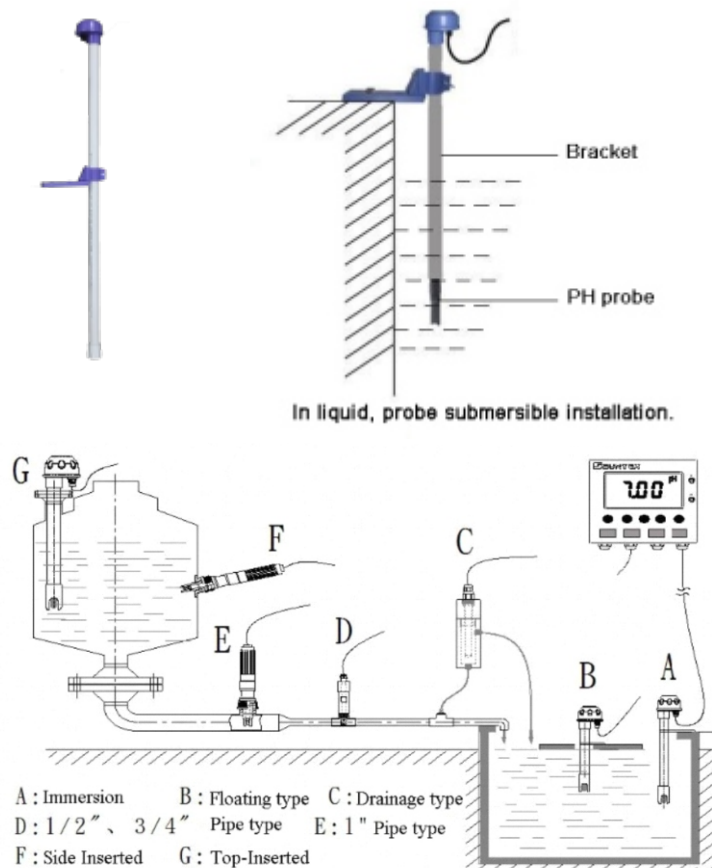


## Electrode Maintenance

When the probe is not in use, it can be soaked in 3mol/l KCL solution or saturated KCL solution. It is strictly prohibited to immerse the electrode in distilled water, deionized water, or tap water with very low ion content. If the pH electrode is contaminated with inorganic substances, it can be cleaned with 0.1mol/l HCl or sodium hydroxide solution for a few minutes, and then rinsed with distilled water. If the pH electrode is contaminated with organic matter, it can be cleaned with alcohol or acetone, and then rinsed with distilled water. (Note: When using, remove the protective cap in front of the electrode) According to the work environment, clean the electrodes with tap water every 3 or 6 months.

## Installation And Fixed

Installation bracket (length=1m) NPT3/4 installation thread is optional





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## Parameter Selection Table

Remark	Series	Type	Supply	Output	Accessory	Cable Length	
RK							
	500						
		06					
			A				7-28V
			X				Other
				A			4-20mA& RS485
				X			Other
					A		With mounting bracket
					N		Without mounting bracket
						5000	Unit(mm)
						...	Unit(mm)

Example: RK500-06AAN5000 Supply:7-28V, Output: 4-20mA& RS485, Without mounting bracket, Cable length:5m.

Revision time	Reviser	Current Version	Remarks
20250719	Echo	V5.0	