## RK500-05 Soil Water Potential Sensor



Soil water potential is the amount of energy required to extract a unit of water from the soil at the same temperature in kilopascals (kPa). When the soil moisture is saturated, the water potential is zero. The water content is lower than the saturation state, and the water potential is negative. The more arid the soil is, the greater the negative value will be. In the study of plant water demand, soil water content cannot reflect the availability of plants, and soil water potential is the only index to judge the degree of drought.

### **FEATURES**

- Real-time measurement
- Good corrosion resistance,
- High accuracy
- Good linearity
- Suitable for high salinity

#### APPLICATIONS

- Environmental monitoring
- Weather station
- Aquaculture
- Ground detection
- Water conservancy
- Agriculture

# **TECHNICAL SPECIFICATION**

Item	Technical Specification
Range	-10~-500kPa
Supply	2.5VDC
Accuracy	$\pm 25\%(\text{-}5\text{100kPa}), \pm 35\%(\text{-100}\text{300kPa}), \pm 50\%(\text{-300}\text{500kPa})$
Resolution	0.1kPa
Element	Ceramic
Response Time	10ms
Output Signal	500~1000 mV (Output in air is about 550mV)
Operating Temperature	-40°C-+70°C
Dimension	90.5 × 30.7 × 11mm
Storage	10-60°C@20%-90%RH
Weight(unpacked)	155g

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