#### RK520-11 All-in-one Soil Sensor



The transmitter has stable performance, high sensitivity, fast response and stable output, and is suitable for various soil types. It is an important tool to observe and study the occurrence, evolution, improvement and water-salt dynamics of saline soil. By measuring the dielectric constant of soil, it can directly and stably reflect the real moisture content of various soils. It can measure the volume percentage of soil moisture, which is a soil moisture measurement method in line with current international standards. It can be buried in the soil for a long time, resistant to long-term electrolysis, corrosion resistance, vacuum potting, and completely waterproof.

The transmitter is suitable for soil moisture monitoring, scientific experiments, water-saving irrigation, greenhouses, flowers and vegetables, grassland pastures, soil rapid testing, plant cultivation, sewage treatment, precision agriculture and other occasions temperature and humidity, conductivity, PH value testing.

### **FEATURES**

- Fast response speed
- Small zero drift and good repeatability
- Low power consumption, long life
- Strong anti-interference ability
- The equipment is stable and reliable
- Simultaneous measurement of multiple parameters

## **APPLICATIONS**

- Agriculture irrigation
- Greenhouse
- Grass farm
- Environment monitoring
- Water Saving Irrigation
- Soil testing

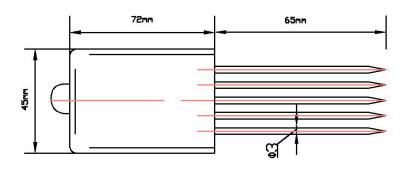
#### **TECHNICAL SPECIFICATION**

| Item                  | Technical Specification           |              |            |
|-----------------------|-----------------------------------|--------------|------------|
|                       | Range                             | Accuracy     | Resolution |
| Temperature           | -40-+80℃                          | ±0.5℃        | 0.1℃       |
| Moisture              | 0-100%                            | ±3%(0-53%),  | 0.1%       |
|                       |                                   | ±5%(54-100%) |            |
| EC                    | 0-10ms/cm                         | ±3%F.s       | 0.01ms/cm  |
| Soil pH               | 3-9 pH                            | ±0.3 pH      | 0.01 pH    |
| Output Signal         | RS485 (Modbus protocol)           |              |            |
| Response Time         | <1s                               |              |            |
| Supply                | 5-30VDC                           |              |            |
| Power consumption     | 0.5W MAX (24V DC power supply)    |              |            |
| Probe material        | Anti-corrosion special electrode  |              |            |
| Sealing material      | Black flame retardant epoxy resin |              |            |
| Operating Temperature | -20℃~+60℃                         |              |            |
| Ingress Protection    | IP68                              |              |            |

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# **DIMENSIONS**



Complies with applicable CE directives.

Specifications subject to change without notice. Version 3.0

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#### Hunan Rika Electronic Tech Co., Ltd

Add: Building B5, Taskin, Yuhua District, Changsha City, Hunan Province, China



+86-731-85132979



info@rikasensor.com



www.rikasensor.com