## RK120-10 Ultrasonic Wind Speed & Direction Sensor

RK120-10 Ultrasonic Wind Speed and Direction Sensor measure the wind speed & direction by using time difference of ultrasonic wave in the air. The products adopts low power chip and the minmum power consumption is 0.01W. It is especially suitable for high power requirements application like the solar energy or battery power supply. The shell can be made of ABS, aluminum alloy or stainless steel. The surface is treated with special oxidation resistance, corrosion resistance and can be used in different environments.

### **FEATURES**

- Adapt to complex weather conditions
- No moving parts, long service life
- The surface preservative treatment
- Strong anti-interference
- High accuracy

## APPLICATIONS

- Environmental monitoring
- Sea buoy wind speed monitoring
- Bridge & Tunnel
- Special pipe wind speed monitoring
- Wind resource assessment
- Drilling platform
- Automatic weather station
- UAV high-altitude wind speed monitoring

# SYSTEM TECHNICAL SPECIFICATION

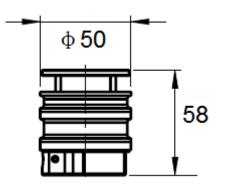
| ltem                  | Technical Specification   |            |          |  |  |  |  |
|-----------------------|---|------------|----------|--|--|--|--|
| Power Supply          | 12-24VDC  |            |          |  |  |  |  |
| Power consumption     | 0.01W(min)  |            |          |  |  |  |  |
| Output Signal         | RS232/RS485(Modbus or NMEA-183), SDI-12                               |            |          |  |  |  |  |
| Operating Temperature | -20°C-+60°C   |            |          |  |  |  |  |
| Ingress Protection    | IP65  |            |          |  |  |  |  |
| Dimension             | $\Phi$ 50×43-58) mm(Dimensions will vary depending on the parameters) |            |          |  |  |  |  |
| Weight(unpacked)      | 0.20kg (ABS)/ 0.28kg (aluminum alloy)/0.58kg (stainless steel)        |            |          |  |  |  |  |
| Main material         | ABS/ aluminum alloy/ stainless steel                                  |            |          |  |  |  |  |
| lterre                | Technical Specification   |            |          |  |  |  |  |
| Item                  | Range   | Resolution | Accuracy |  |  |  |  |
| Wind speed            | 0-60m/s   | 0.1m/s     | ±3%      |  |  |  |  |
| Wind direction        | 0-359°  | 1°         | ±3°      |  |  |  |  |
| Starting Threshold    | 0.1m/s  |            |          |  |  |  |  |
| Extreme Wind Speed    | 60m/s   |            |          |  |  |  |  |

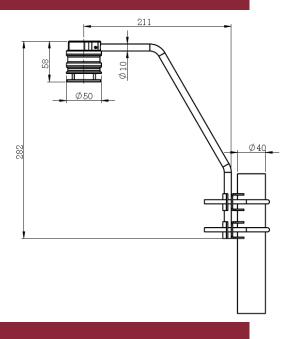




## **MOUNTING & DIMENSION**

unit: mm





## PARAMETER SELECTION TABLE

| Remark | Series | Туре | Material | Supply | Output | Cable length |                 |
|--------|--------|------|----------|--------|--------|--------------|-----------------|
| RK     |        |      |          |        |        |              |                 |
|        | 120    |      |          |        |        |              |                 |
|        |        | 10   |          |        |        |              |                 |
|        |        |      | А        |        |        |              | ABS             |
|        |        |      | В        |        |        |              | Aluminum alloy  |
|        |        |      | С        |        |        |              | Stainless steel |
|        |        |      |          | А      |        |              | 12-24V          |
|        |        |      |          | Х      |        |              | Other           |
|        |        |      |          |        | А      |              | RS485(Modbus)   |
|        |        |      |          |        | В      |              | RS485(NMEA-183) |
|        |        |      |          |        | С      |              | RS232(Modbus)   |
|        |        |      |          |        | D      |              | RS232(NMEA-183) |
|        |        |      |          |        | E      |              | SDI-12          |
|        |        |      |          |        |        | 4000         | 4m default      |
|        |        |      |          |        |        | 10000        | 10m             |
|        |        |      |          |        |        |              |                 |

Example: RK120-10AAE4000 ABS, Supply:12-24V, Output: SDI-12 Cable length:4m.

**C C** Complies with applicable CE directives. Specifications subject to change without notice. Version 1.0 Copyright © 2015 Hunan Rika Electronic Tech Co.,Ltd

#### Hunan Rika Electronic Tech Co., Ltd Add: Building B5, Taskin, Yuhua District

Add: Building B5, Taskin, Yuhua District, Changsha City, Hunan Province, China +8

e

+86-731-85132979

info@rikasensor.com

www.rikasensor.com

PAGE 2 OF 2