### RK900-12 Ultrasonic Automatic Weather Instrument



RK900-12 mini automatic weather station is a civil integrated weather station independently developed by our company that can measure multiple meteorological parameters. It can simultaneously measure six major meteorological elements such as atmospheric temperature, atmospheric humidity, wind speed, wind direction, air pressure and rainfall.RK900-12 user a low-power chip with a power consumption of only 1.7W, which is especially suitable for solar energy or battery-powered environment with high requirements on power consumption. As a result of the adoption of new technology and new process, the structure is more compact and compact. Solar radiation and solar illuminance detection module can also be selected, which is very suitable for supporting agricultural meteorological system. The outer shell is ASA engineering plastic.

#### **FEATURES**

- High accuracy, fast response
- Easy to install, all-weather measurement
- RS485/RS232/SDI-12 output
- No moving parts, maintenance free
- Use radar measurement of precipitation, accurately reflect the rainfall and start-stop moment
- Compact and compact structure
- low power consumption

## **APPLICATIONS**

- Environmental monitoring
- Sea-going vessel
- Bridge & Tunnel
- Solar and wind power generation
- Wind resource assessment
- Drilling platform
- Automatic weather station
- Agriculture

### **TECHNICAL SPECIFICATION**

item	Technical Specification				
	Range	Resolution	Accuracy		
Wind speed	0-70m/s	0.1m/s	±3%		
Wind direction	0-359°	1°	±3°		
Atmospheric temperature	-40℃ — +80℃	0.1℃	±0.5℃		
Atmospheric humidity	0-100%	1%	±5%		
Atmospheric pressure	300 — 1100hPa	0.1hPa	±1		
Rainfall	0-200mm/hr.	0.1mm	±5%		
Altitude	-500m - 9000m	1m	±5%		
Radiation	$0-2000 \text{W/m}^2$	0.1 W/m2	±5%		
Illumination	0-2000001ux	0.1 lux	±5%		



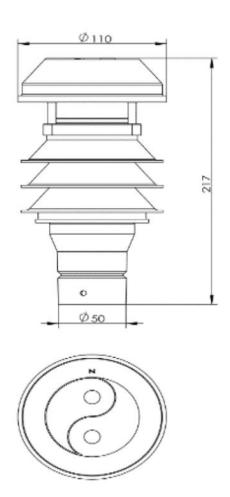


# RK900-12 Ultrasonic Automatic Weather Instrument

UV	$0-2000 \text{W/m}^2$	0.1W/m2	±10%				
PM2.5,PM10	0-2000ug/m3	1 ug/m3	±5%				
Item	Technical Specification						
Power Supply	12-24VDC						
Power consumption	<1.7W						
Output Signal	RS232/RS485(Modbus or NMEA-183), SDI-12						
Operating Temperature	-20°C-+50°C						
Ingress Protection	IP65						
Dimension	Φ110*(217-298)mm(Dimensions will vary depending on the parameters)						
Weight(unpacked)	0.39kg						
Main material	ASA						

# **DIMENSION**

# Unit:mm



# RK900-12 Ultrasonic Automatic Weather Instrument



## **PARAMETER SELECTION TABLE**

Remark	Series	Туре	Supply	Output	Communication Protocol	Measure parameters	
RK					1 1010001	parametere	
	900						
		12					
			Α				12-24VDC
			Х				Other
				А			RS232
				В			RS485
				С			SDI-12
					А		Modbus-rtu(default)
					В		NMEA-0183
					С		SDI-12
					Х		Other
						M5	Wind speed, wind direction
							temperature & humidity
							air pressure
						M6	Wind speed, wind direction
							temperature & humidity
							air pressure, rainfall
						Х	Customized ①

①Wind speed and direction are necessary, and other parameters can be combined freely

Copyright © 2015 Hunan Rika Electronic Tech Co.,Ltd

#### 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