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
- $\ \square$ Solar and wind power generation
- □ Wind resource assessment
- ☐ Drilling platform
- □ Automatic weather station
- ☐ Agriculture

TECHNICAL SPECIFICATION

Item	Technical Specification				
item	Range	Resolution	Accuracy		
Wind speed	0-70m/s	0.1m/s	±3%		
Wind direction	0-359°	1°	±3°		
Atmospheric temperature	-40°C-+80°C	0.1°C	±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	0-2000W /m ²	0.1 W/m ²	±5%		
Illumination	0-200000lu x	0.1 lux	±5%		
PM2.5,PM10	0-2000μ g/m ³		±5%		



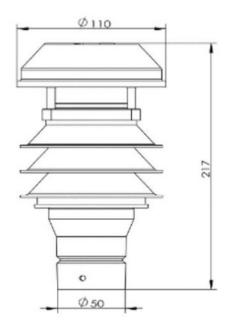
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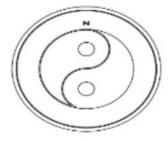


Item	Technical Specification			
Power Supply	12-24VDC			
Power consumption	<1.7W			
Output Signal	RS232/RS485(Modbus or NMEA-183), SDI-12			
Operating Temperature	-20°C-+50°C			
Ingress Protection	IP65			
Dimension	Φ110*(217-298)mm(Dimensions will vary depending on the parameters)			
Weight(unpacked)	0.39kg			
Main material	ASA			

DIMENSION

Unit:mm







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PARAMETER SELECTION TABLE

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

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

Complies with applicable CE directives.

Specifications subject to change without notice. Version 4.0

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