# RK120-01 Wind Speed & Direction Sensor

RK120-01 Wind Speed & Direction Sensor is an integrated design construction which combines wind speed and direction sensing element in one unit. The sensing component is sealed in the waterproof housing shell. The rotary wind cups drive the electronic counter for counting, and then the wind speed can be recorded by counting datum within a fixed time period. The wind direction is measured by the vane rotary which can drive the angular velocity sensor. It features low starting, non-blind zone measurement and a long service life.

#### **FEATURES**

- Combined wind speed & direction sensor
- Low starting threshold
- Good corrosion resistance
- Compact and light design
- Easy installation

#### **APPLICATIONS**

- Environmental monitoring
- Bridge & Tunnel
- Solar and wind power generation
- Wind resource assessment
- Automatic weather station
- Agriculture

## **TECHNICAL SPECIFICATION**

ltem	Technical Specification			
item	Wind speed	Wind direction		
Range	0-60m/s	0-360°		
Resolution	0.2m/s	1°		
Accuracy	±2%	≤±3°		
Acquisition Cycle	3s			
Supply	12-24VDC			
Output Signal	RS485,4-20mA			
Operating Temperature	-40℃-+70℃			
Ingress Protection	IP65			
Main material	Housing: AlMgSi, gray anodized			
Storage	10-60℃@20%-90%RH			
Dimensions	265 (h) × 360 (Ø) mm			
Weight(unpacked)	380g			

## PARTS

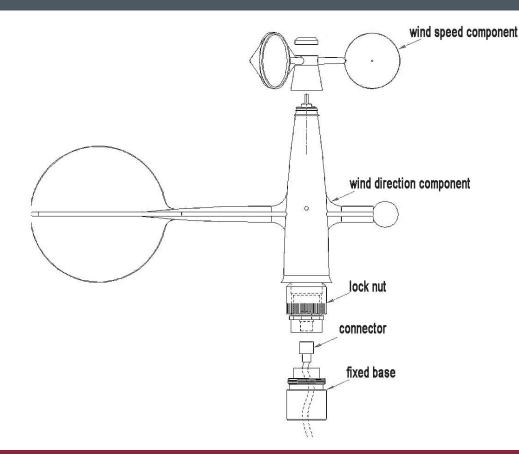




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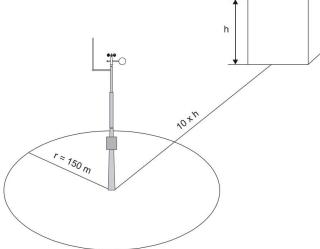
## MOUNTING

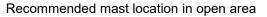
Aluminum adapter connector which can connect the product with bracket is optional. The aluminum adapter connector is fixed with the sensor on one end, and the other end is inserted in to the main stem of bracket. It can be fastened by 3 pieces of screws.



Allow sufficient clearance for the wind sensor.Install the wind sensor away from buildings or any other objects that might affect the airflow.

In general,any object of height(h) will not remarkably disturb the wind measurement at a minimum distance of 10\*h.There should be at least 150m open area to all directions from the mast.Refer to right figure .

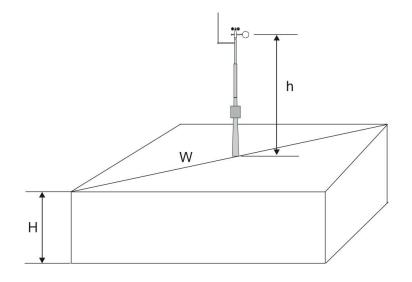




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The recommended minimum length(h),for the mast that is installed on the top of a building is 1.5 times the height of the building(H).When the diagonal(W) is less than the height(H) the minimum length of the mast is 1.5\*W.



#### Recommended mast length on the top of a building

# PARAMETER SELECTION TABLE

Remark	Series	Туре	Supply	Output	Cable Length	
RK						
	120					
		01				
			А			12-24VDC
			Х			Other
				А		4-20mA
				В		RS485
				Х		Other
					1500	Units:mm (typ)
					3000	Units:mm
						Units:mm

Example: RK120-01AA1500 Supply:12-24V,Output:4-20mA,Cable Length:1.5m.

Complies with applicable CE directives. Specifications subject to change without notice. Version 3.0 Copyright © 2015 Hunan Rika Electronic Technology Co.,Ltd

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