

The RK120-01 combined wind speed and direction sensor is assembled with ABS and aluminum alloy precision machined parts, with high strength and easy installation. The wind speed section adopts a traditional three wind cup structure, which is made of ABS and has good starting performance, a large measurement range, good linearity, and stable reliability. The wind direction section adopts low inertia wind direction to respond to the wind direction. When the wind direction changes, the rear wheel drive angle sensor senses the change in azimuth, resulting in a change in electrical signal output. It has good linearity, high accuracy, and no blind spots.

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

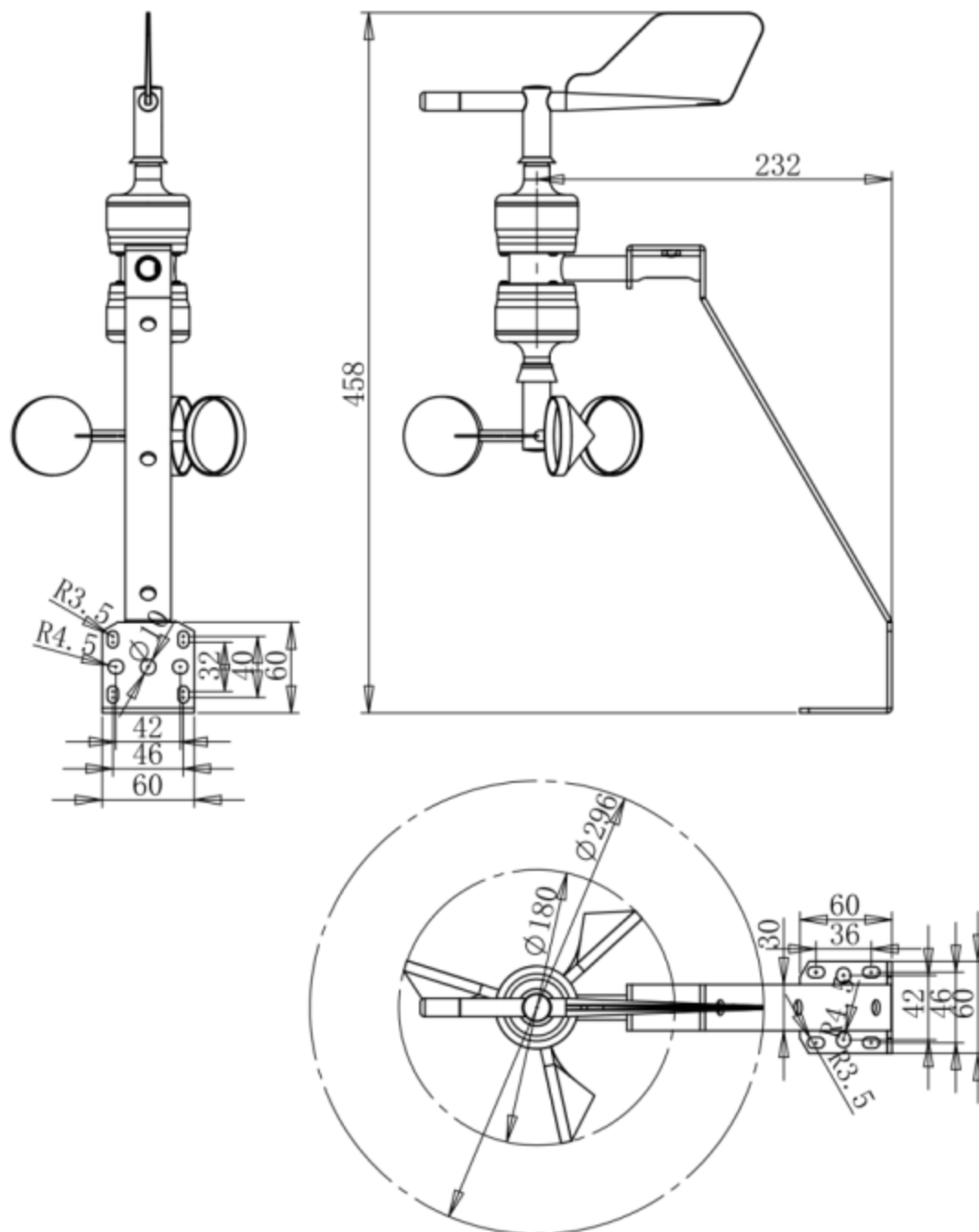


TECHNICAL SPECIFICATION

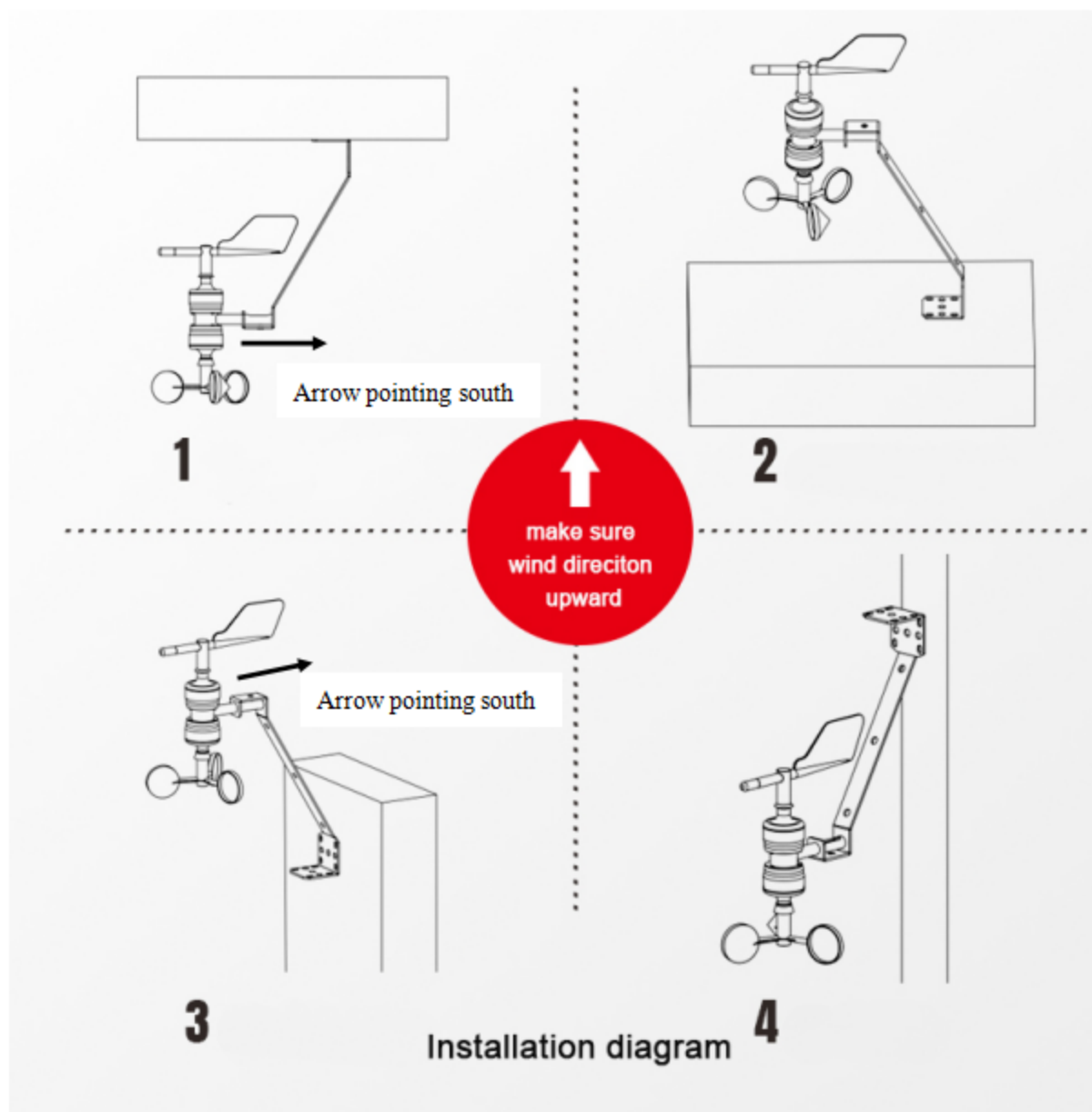
Item	Technical Specification	
	Wind speed	Wind direction
Range	0-45m/s (current or voltage output); 0-70m/s (pulse, RS485, RS232 output)	0-360°
Resolution	0.1m/s	1°
Accuracy	$\pm(0.3+0.03V)$ m/s, V is current wind speed	$\leq \pm 3^\circ$
Starting wind speed	≤ 0.5 m/s	
Limited wind speed	75m/s	
Supply	5V (only for digital output), 12-24VDC	
Output signal	RS485, 4-20mA, 0-5V, RS232, pulse (NPN, only for wind speed)	
Power consumption	0.7W max.	
Operating temperature	-40°C ~ +70°C	
Ingress protection	IP65	
Main material	Aluminum alloy and ABS	
Storage	10-60°C @ 20%-90%RH	
Cable length	Default 2.5m, other length is optional	
Installation bracket	attached	
Weight(unpacked)	1200g(with bracket)	

DIMENSION

Unit:mm



MOUNTING



Ensure that the indicator arrow points south during installation

PARAMETER SELECTION TABLE

Remark	Series	Type	Supply	Output	Cable Length	
RK						
	120					
		01				
			A			12-24VDC
			B			5V (only for digital output)
			X			Other
				A		4-20mA(0-45m/s,0-360°)
				B		RS485(0-70m/s,0-360°)
				C		0-5V(0-45m/s,0-360°)
				D		RS232(0-70m/s,0-360°)
				E		Pulse for wind speed Wind direction output is optional(0-70m/s,0-360°)
				X		Other
					2500	Units: mm (typ)
					...	Units: mm

Example: RK120-01CAA2500 Supply:12-24V, Output:4-20mA,Cable Length:2.5m.

Revision time	Reviser	Current Version	Remarks
20250401	Lee	V5.0	