The RK320-01 laser ceilometer is mainly used to measure the height of the cloud base, the penetration thickness of the cloud layer, and count the cloud amount, and output the vertical visibility when the sky is blurred. It is mainly used in airports, ships and other transportation departments and weather stations. The laser ceilometer has the advantages of simple structure, good working stability, high reliability, low energy consumption, and convenient use and maintenance.

FEATURES

- Automatic collection and measurement of cloud base height
- Can measure up to three layers of clouds
- It can measure the inclination in two directions and the distance of hard objects
- Self-check function
- Automatic protection
- Historical data storage

APPLICATIONS

- Airport
- Ocean maritime
- Transportation department
- Mobile measurement
- Environmental protection

TECHNICAL SPECIFICATION

Item	Technical Specification
Range	30-10000m
Measurable cloud number	Up to 3 layers of clouds
Measurement error of hard	±15m
objects	
Accuracy(horizontal	cloud height <1km, ±200m
visibility>2km)	cloud height ≥1km, ±20%
Resolution	5m
The sampling period	30 seconds to 300 seconds can be set continuously
Supply	198VAC~242VAC
Power	When not heating \leqslant 100W; When heating \leqslant 700W
Communication	Interface Type: RS232/RS485
	Maximum wired transmission distance: not less than 300m







RK320-01 Laser Ceilometer

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Working environment	Ambient temperature: -40°C~50°C;
	Relative humidity: 95%RH (30℃)
Storage environment	Ambient temperature: -55°C~60°C;
	Relative humidity: 95%RH (35℃)
Reliability and maintainability	Mean time between failures: MTBF≥500h
	Average repair time: MTTR≤0.5h

Install

An installation plan should be made before starting the installation of the ceilometer so that the installation can go smoothly.

1) Wiring planning: Determine the wiring planning and cable type of power lines, grounding lines and communication lines;

2) Foundation: prepare the foundation for installation;

3) Connecting cables: Connect the power line, communication line and grounding line of the site to the power port, communication port and grounding port of the equipment respectively, and connect the communication line to the serial port of the background computer.

Positioning and Orientation

Install the ceilometer on the working foundation, place it horizontally when measuring hard objects, and place it vertically when measuring cloud layers. When fixing the foundation, make sure that the sun cannot directly shine on the lens of the ceilometer, so as not to burn the equipment parts. For this reason, the placement position of the ceilometer should be consistent with: the northern hemisphere window is placed north, and the southern hemisphere window is placed south (this placement is only valid for north or south latitudes above 30°). Figure 3 shows the orientation of the ceilometer in the northern hemisphere. Adjust the placement direction in time with seasonal changes to avoid direct sunlight.



Orientation of Ceilometer in Northern Hemisphere

CE

Complies with applicable CE directives.

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