

UAV visibility meter

Model SEM226W2



Introduction

The SEM226W2 visibility meter is designed for monitoring and collecting meteorological data in the air when unmanned aircraft or small unmanned inspection aircraft are in flight;

The SEM226W2 visibility meter is compact in appearance and uses the forward scattering principle to measure atmospheric visibility. It can work normally at an altitude of 4,000 meters and an environment of minus 20 degrees Celsius;

The SEM226W2 visibility meter is flat in appearance and is hoisted on the belly of the aircraft with low wind resistance. Users can choose ABS and aluminum alloy shell materials as needed, and can also choose temperature, humidity and air pressure sensors.

The SEM226W2-3 visibility meter consumes only 0.9 watts of power, making it very suitable for small UAV platforms and flight control systems, as well as using aircraft for low-altitude environmental inspections.

Working principle

Haze is composed of many tiny water droplets and various fine particles in the air. Infrared light emitted from the light source is scattered by water droplets and then detected by a highly sensitive detector. Within a certain range, the more water droplets or other tiny particles are detected, the greater the intensity of the scattered light. The light scattering intensity is converted into a standard visibility value through embedded software calculation.

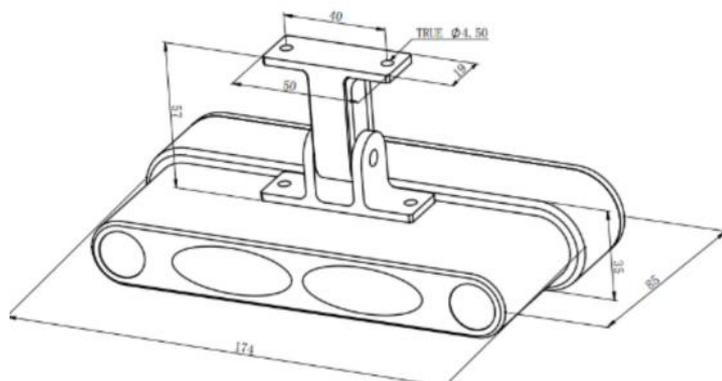


Main features

- Forward scatter type
- Mini shape, ultra-light weight
- Low wind resistance
- Low power consumption, only 0.9 watts
- Strong anti-electromagnetic interference and dustproof function
- Can work at an altitude of 4000 meters and minus 20 degrees

Application

- Aerial photography and film and television production
- Logistics and distribution
- Agricultural plant protection and monitoring
- Electricity and infrastructure inspection
- Disaster relief and environmental monitoring
- Military and public security



Unit:mm

Specification

Detection range:	10-10000 meter
Measurement accuracy:	±10%
Light source:	IR LED
Response time:	1 seconds
Digital output:	RS485, RS232, TTL
Optional elements	temperature, humidity, air pressure
Working temperature:	-20-50 °C
Working humidity:	0-95%
Supply voltage:	VDC 12
Power consumption:	0.9W
Visibility Dimensions:	174mm * 85mm * 35mm
Visibility Weight:	Visibility meter weight (ABS material): 300g Visibility meter weight (aluminum alloy material): 580g

Order guide

SEM226W2	Visibility Sensor		
	CODE	Material	
	A	Aluminum alloy	
	B	ABS	
		CODE	Signal output
		1	RS485
		2	RS232
		3	TTL
SEM226W2	B	1	Order example