

HY-SLV3E Visibility Sensor

Brief Introduction

HY-SLV3E is a low cost visibility sensor working based on backward scattering principle developed by Hongyuv. Main application is for traffic purposes. Aluminum alloy shell with spray-powder make it will never rust, applicable to drilling platforms, ships, highways and other transport sector.



Using so called backward-scattering technique it measures the amount of particles in the air that limit the visibility. It emits pulses of infrared light and measures the intensity of the backward-scattered light of the suspended particles in the atmosphere, using suitable algorithms to convert the measurements to meteorological visibility values.

Advantages

- Flexible output options.
- High-performance sensor at a competitive price
- Compact, lightweight package.
- Simple installation & maintenance
- Integrated heater for all-weather operation.

Working Principle

HY-SLV3E emits a bunch of infrared light with center wavelength of $0.87\mu\text{m}$ to the atmosphere, and the receiver response to a certain volume of atmospheric backward-scattered light, then signal is processed and collected by DAM(Data Acquisition Module), and then calculated as visibility values and output via RS485 or RS232

Specification

Range	10-4000m	Power supply	12-24VDC
Accuracy	$\pm 20\%$	Power consumption	6W
Communication	RS232,RS485	Operating Temp.	$-50^{\circ}\text{C}\sim+50^{\circ}\text{C}$
Dimension	-	Operating humidity	0~100%
Weight	-	Protection Class	IP65
MTBF	5 years	Warranty Period	2 years

Specifications may be subject to change without prior notice.

Site Photos

