

HY-IRS2E Non-contact Infrared Road Surface Temperature Sensor

Brief Introduction

HY-IRS2E is a compact infrared temperature sensor. The optical analysis system is sited in a compact aluminium shell. An 90° adjustable mounting bracket allows an easy installation. It's designed for industrial, outdoor 7/24 monitoring.



HY-IRS2E is composed of a thermopile and a thermistor and works based on a basic principle that all objects with a temperature above absolute zero emit electromagnetic radiation. The wavelengths and intensity of radiation emitted are related to the temperature of the object.

By measuring the infrared radiation energy of their own, their surface temperature can be obtained by HY-IRS2E, which is also the greatest advantage of HY-IRS2E.

Application Scopes

- Pavement roadway surface temperature monitoring
- Bridge surface temperature monitoring
- Plant canopy temperature monitoring
- Surface temperature monitoring of soil, snow cover, grass



Technical Specification

Measure Range	-40-70℃
Accuracy	±1% or ±2℃
Distance to Target: Target Diameter	D:T=8:1
Resolution	0.1℃
Respond Time	1 s
Spectral Range	8-14um
Output Interface	RS485
Protocol	ModBus
Operating Environment	-38 - 70℃; 0-100% RH
Power Supply	DC7-15V
Power Consumption	10mA @ 12VDC
Dimension	130mm*φ40mm
IP Grade	IP65