

TruSense

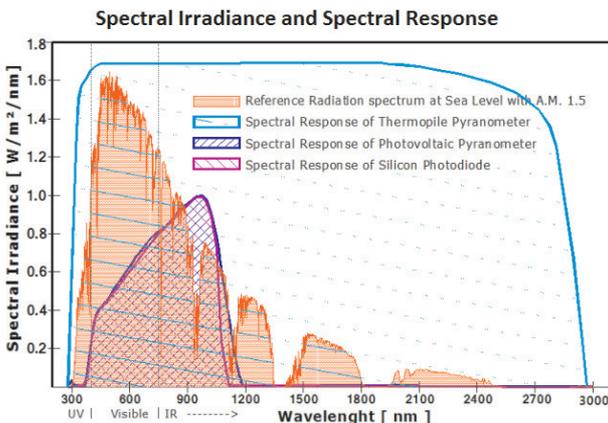
Input Module

Py-TS

The TruSense Input modules are an I2C based module with memory and the interface to the sensors. When an Input module is connected to a TruSense logger the logger reads the Input Module's memory and this gives the logger all the information on the sensors that may be attached to the module.

The Py-TS module is a Thermopile pyranometer for measuring solar irradiance or solar energy in W/m^2 .

A thermopile pyranometer is a sensor based on thermopiles designed to measure the broadband of the solar radiation flux density from a 180° field of view angle. A thermopile pyranometer thus usually measures 300 to 2800 nm with a largely flat spectral sensitivity



Specifications

Size

Dimensions 165x165x120mm
 Weight 2.5Kg
 Material Glass, Aluminium.

Environment

Protection Ip65
 Operating Temp. $-40^\circ C$ to $60^\circ C$ Ice will effect accuracy.
 Storage temp. $10^\circ C$ to $60^\circ C @ 20\%-90\% RH$

Solar irradiance

Device Thermopile with two glass domes.
 Spectral range 300 to 3200nm
 Range $0 \sim 2000 W/m^2$
 Response time <35 seconds (99%)
 Resolution $1 W/m^2$
 Non-Linear < $\pm 2\%$
 Temperature effect $\pm 2\%$ ($-10^\circ C$ to $+40^\circ C$)
 Stability < $\pm 2\%$ /year
 Cosine error < $\pm 7\%$ from vertical to 80° all directions.

Standard.

WMO standard Second Class
 Official test report Available by order cost \$250USD