

# PAR (Photosynthetically Available Radiation)

## WSS-07



## Overview:

WSS-07 photosynthetically active radiation sensor is mainly used to measure the photosynthetically active radiation of natural light in the wavelength range of 400-700nm.

WSS-07 use precision optical detectors and has an optical filter of 400-700nm, when natural light is irradiated, a voltage signal proportional to the intensity of the incident radiation is generated, and its luminous flux density is proportional to the cosine of the direct angle of the incident light.

WSS-07 is designed to support the Dragino Weather station solution.

Users only need to connect WSS-07 RS485 interface to WSC1-L. The weather station main processor WSC1-L can detect and upload Photosynthetically Available Radiation to the IoT Server via wireless LoRaWAN protocol.

## Features:

- PAR (Photosynthetically Available Radiation) sensor measure 400 ~ 700nm wavelength nature light's Photosynthetically Available Radiation.
- When nature light shine on the sense area, it will generate a signal base on the incidence radiation strength.

## Specification:

- Input Power: DC 5 ~ 24v
- Interface: RS485
- Response Spectrum: 400 ~ 700nm
- Measure range: 0 ~ 2500 $\mu$ mol/m<sup>2</sup>•s
- Resolution: 1 $\mu$ mol/m<sup>2</sup>•s
- Accuracy:  $\pm$ 2%
- Yearly Stability:  $\leq$  $\pm$ 2%
- Working Temperature: -30 $^{\circ}$ C ~ 75 $^{\circ}$ C
- Working Humidity: 10 ~ 90%RH
- Power Consumption: 3mA @ 12v

Order Part #- WSS-07