

LoRaWAN Sensor Device

Photosynthetically Active Radiation



Sensors

Apogee SQ-110
Photosynthetically active radiation

Linear Range: 0-5000 $\mu\text{mol m}^{-2}\text{s}^{-1}$ (less than 1 %)
Full Sunlight: 2000 $\mu\text{mol m}^{-2}\text{s}^{-1}$

Spectral Range: 410 nm to 655 nm (wavelengths where response is greater than 50 % of maximum)

Measurement Repeatability: Less than 0.5 %

Non-stability (Long-term Drift): Less than 2 % per year

Photosynthetic Photon Flux (PPF) in $\mu\text{mol m}^{-2}\text{s}^{-1}$ from a field of view of 180 degrees

5m cable

LoRaWAN specifics

Device class A

Over the air activation (OTAA)

Adaptive data rate (ADR)

Frequency bands:
EU868 MHz (EU Version), US915MHz (US Version),
or AU920 (Australia Version)

Input Sensitivity: -148 dBm (EU Version)

Supply

Internal battery 2 x C-type
Integrated sensor supply

Operating conditions

-30°C to 60°C
100% RH

Weight

250g w/o batteries

Dimensions

LoRaWAN sensor device: 80 x 135 x 70 mm

Enclosure

Weatherproof, impact and UV- resistant polycarbonate enclosure

Dimensional drawings (only enclosure)

