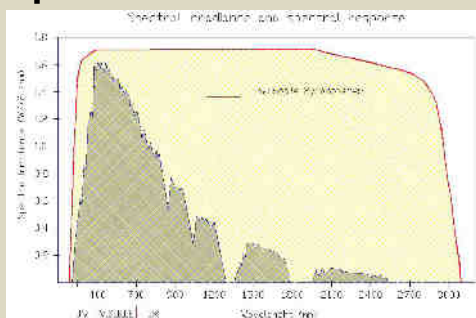


PYR1-420 / PYR2-420

PYR1-420 is a thermopile pyranometer for measuring solar irradiance. Manufacturing and Calibrations are done following the ISO 9060 – WMO - ISO 9846 standards.

Spectrum of interest



Measurement features

PYR1-420 is equipped with electronics to amplify a very weak signal coming from the thermopile.

It is composed of the best operational amplifiers on the market to guarantee linearity, rejection of disturbances, constant behavior over time and temperature variations.

It has a 4 to 20 mA output signal.

Most common uses

Pyr1-420 is used in meteorological uses and for controlling the performance of PV systems.

Physical characteristics

Anodized aluminum casing, encapsulated with a special glass transparent and quartz [k5] dome.

Dimensions



| Name | | PYR1-420 | PYR2-420 |
|--------------------------|--|---|--|
| Type of product | Thermopile pyranometer | | |
| Reference Standard | ISO 9060:1990 ISO 9060:2018 | I Class Class B | II Class Class C |
| Output | 4 + 20 mA current loop | | |
| Calibration | Complies to ISO9847 | By Secondary Standard Pyranometer calibration certificate | By First Class Pyranometer calibration certificate |
| Calibration traceability | WRR | | |
| Spectral Range | | 300*2900nm | 300*2900nm |
| Input Range | | 0*2000 W/m ² (Taiwan) | |
| Response time | | < 20 sec | < 25 sec |
| Temperature response | | < ± 2 % (-10 to +40°C) | |
| Zero offset | Thermal radiation (at 200 W/m ² 4 | <14 W/m ² | <20 W/m ² |
| | Temperature change (5 k/h) | , ± 3 W/m ² | , ± 6 W/m ² |
| Resolution | Smallest detectable change | ± 4 W/m ² | ± 8 W/m ² |
| Working Range | -40 ÷ +80°C | | |
| Field of view | 180° | | |
| Stability (along 1 year) | | < ± 1.5% | < ± 2% |
| Output | Current Loop | 4 ÷ 20mA Output normalized | |
| Output precision | Tilt response (0 ÷ 90°) | , ± 2% | , ± 4% |
| | Temp. Response (Δt = 50 >4 | , 4% | , 8% |
| Supply | 9 ÷ 30 Vdc protected against short circuit | | |
| Encapsulation | Quartz [k5] dome | Special glass transparent to: 0,3*3,0 μm double | Special glass transparent to: 0,3*3,0 μm single |
| Case | Anodized Aluminum | | |
| Connector | standard M8 3 pin female | | |
| Dimensions | Φ 162 x h 104 mm | | |
| IP Grade | IP 67 | | |