# Plugsensor

## Total Solar Radiation (Thermopile)



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INDÚSTRIA BRASILEIRA DE TECNOLOGIA

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## Total Solar Radiation (Thermopile)

The **Plugsensor Total Solar Radiation (Thermopile)** measures global solar irradiance over a 180° field of view with high accuracy, featuring a double quartz dome and a spectral range of 300 to 3,200 nm. Used in applications such as solar power plant monitoring, photovoltaic system validation and energy modeling, it provides reliable data for performance analysis, KPI generation and strategic decision support in the energy sector.



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**Plugsensor Solar Radiation (Thermopile)**
SKU 40.03.0065

# Technical Specifications

| Parameter | Description |
|---|---|
| Output Interface | RS485 / Modbus-RTU |
| Power Supply | 9 to 24 VDC |
| Spectral Range | 300 to 3,200 nm |
| Measurement Technique | Thermopile |
| Dome | Double (quartz glass) |
| Non-linearity | ≤ ±2% |
| Annual Stability | ≤ ±2% |
| Temperature Coefficient | (-10 to 40 °C) ≤ ±2% |
| Cosine Response Error | (10° Solar Elevation) ≤ ±7% |
| Azimuth Error | (10° Solar Elevation) ≤ ±5% |
| IP Rating | IP65 |
| Operating Temperature | -10 °C to 85 °C |
| Enclosure | Metallic |
| Dimensions | Ø160 x 75 mm |
| Cable / Connector | 0.6 meters with 5x 22 AWG / SP13 Series - IP68 |

Sensor available only for integration with the Plugstation from model WS22 onward.