Spectrafy
solar spectral sensors

iSG Integrated Spectrum Generator

The iSG Integrated Spectrum Generator simplifies integration of the SolarSIM-GPV by enabling in-line processing of the SolarSIM-GPV's raw data.

Processed global irradiance and spectral correction factor data can be fed directly to an onsite datalogger and subsequent SCADA system, without the need for additional software or processing hardware.

The iSG Integrated Spectrum Generator acts as a go-between, pulling raw data from the SolarSIM-GPV, processing it, and then outputting it to the met station data logger, via the RS485 Modbus RTU communication protocol.

This removes the need for additional data processing hardware and software and allows integrators to offer a turn-key solution for spectrally corrected irradiance.

Physically, the iSG can either be deployed in open-air, or within the data logger enclosure where it mounts via standard DIN rail.

- **Streamline deployment.**
  The iSG Integrated Spectrum Generator simplifies deployment of the SolarSIM-GPV by enabling inline processing of spectral data.

- **Compact, low-power, robust.**
  The iSG is designed for robust, field performance while minimizing space and power requirements.

- **Industry standard communication.**
  The iSG communicates via standard RS485 Modbus RTU protocols. Exemplar datalogger code is provided with each iSG.

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Compatibility

Compatible SolarSIMs   SolarSIM-GPV

Outputs

Global irradiance   GHI/GTI (ISO9060:2018 Class A)
PV spectral correction factors   Up to nine user-defined panels
SolarSIM-GPV raw data

General

Weight   0.3 kg
Dimensions (L x W x H)   150 x 100 x 50 mm
Power supply and use   12 VDC, 6.2W (5.2W max for iSG, + 1W for SolarSIM-GPV)
Communication   RS-45 Modbus RTU
Operating temperature range   -30°C to +65 °C
Humidity range   0 to 100% RH
Environmental protection   IP66
Mounting   DIN rail
Ports   1. SolarSIM. 2. Power. 3. Datalogger.