



CONERGY

Internet-based monitoring system for PV systems | Specifications

Conergy SunReader

The Conergy SunReader system allows the convenient, secure monitoring of PV systems with string inverters of the Conergy IPG series. Yield-reducing faults are automatically detected and reported by text message, e-mail and/or fax so that counter-measures can be initiated promptly.



Conergy SunReader and power supply

The Conergy SunReader kit is a perfectly coordinated complete system consisting of the following components:

- | Conergy SunReader control unit
- | Power supply unit
- | Irradiation and temperature sensor
- | Internet portal www.sunreader.de



Irradiation and temperature sensor

Precise output assessment and monitoring

The Conergy SunReader system replaces the constant personal monitoring of the PV system. Using the irradiation and temperature sensor, the Conergy SunReader determines the specified yield of the system and compares it to the actual yield information from the inverter. In event of deviations, an alarm is triggered via text message, e-mail and/or fax. In addition to the system operator, other persons, e.g. service technicians, can be informed. The threshold values can be individually set by the user. The system output is thus always precisely determined and monitored.

Individual monitoring and innovative communication bus

The SunReader system is the first PV system monitoring based on the robust CAN-bus for data communication. This communication bus, used primarily in the automobile sector, allows the secure interaction of a number of system components and inverters. With a Conergy SunReader, up to 20 Conergy IPG string inverters can be individually read out. Inverters and other components are recognised via Plug&Play and can be used immediately. The Conergy SunReader can be updated online and in addition allows online updates of Conergy IPG string inverters.



System monitoring on the Internet

The Conergy SunReader stores the system data and transmits it periodically to the Internet portal. For transmission, the modem types analogue and GSM as well as Ethernet, are possible. In the Internet portal, all transmitted system data are archived and are available to the system operator at any time at www.sunreader.de. In addition to a clear presentation of all relevant system data, historic data can be graphically evaluated and if necessary exported for further processing. The Internet portal also allows convenient parametering of the Conergy SunReader system (threshold values, recipients for alarm messages, etc.).

More information and test access can be obtained at:
www.sunreader.de

You can call us at
+49 180 5 55 39 55



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Operating voltage	12–24 V _{DC}
Power consumption	3 W (7 W GSM)
Input	2 analogue inputs for temperature and irradiation sensors S0 impulse input according to DIN 43864 for an energy meter
Communication	Data modem (Analogue/GSM/Ethernet), data bus connection (external) for connection of inverters, CANopen for system extension, RS-232 interface
Display elements	4 LEDs for displaying status and operational state
Data storage	Variable storage capacity through the use of SD flash memory
Protection type	IP 20
Ambient temperature	–20 to +60 °C
Installation	Top-hat rail mounting
Physical dimensions (W x H x D)	45 x 99 x 114.5 mm

ET-sensor

Temperature measurement range	–40 to +100 °C, tolerance ± 2k at 25 °C
Irradiation measurement range	0–1,400 W/m ² , tolerance ± 3 %, spectral sensitivity 400–1,100 nm
Physical dimensions¹ (W x H x D)	40 x 95 x 110 mm

Power meter/current transformer meter

General note	Not necessary with Conergy IPG string inverter
Power supply	3 x 230 / 400 V _{AC} , max. 63 A (5 A) ²
Current path, power consumption	< 0.5 VA
Voltage path, power consumption	< 1.6 VA
Operating current range, limit current range	5–63 A, (1–5 A) ²
Operating frequency	50 Hz
Impulse rate	1,000 Impulses / kWh
Protection type	IP 51
Physical dimensions (W x H x D)	125 x 96 x 66 mm

Power supply

Grid input voltage	100–240 V _{AC} , 50/60 Hz
Power output	7 W
Output voltage	12 V
Protection type	IP 20
Physical dimensions (W x H x D)	45 x 99 x 114.5 mm

Available from:

¹ Without accessories

² The values relate to a current transformer meter. This will be delivered when at least one phase has a load in excess of 60 A (this is normal for systems larger than approx. 50 kWp).