



CONERGY

Active monitoring system for large-scale PV systems | Technical data

Conergy SmartControl

Innovative monitoring and analysis system with new remote diagnostic system and continuous system monitoring.

Advantages at a glance

- | Large-scale system monitoring with automatic fault indication via e-mail, SMS and fax
- | Individual read out of Conergy IPG central inverters
- | Active dialling into real-time monitoring, analysis and control of the system

Reliable monitoring and analysis system

Conergy SmartControl is a reliable monitoring and analysis system for large PV systems. Automatic monitoring replaces the need for continual checking in person. Conergy central inverters can be networked and read out individually using the Conergy SmartControl. The CANopen communication standard guarantees reliable communication and thus ensures reliable monitoring of all system components and problem-free operation.

The Conergy SmartControl system consists of the following components:

- | Conergy SmartControl monitoring unit
- | Power adaptor
- | Irradiation and temperature sensor
- | <http://control.conergy.com> Internet portal
- | Conergy ControlCenter software

Conergy SmartControl is upgradeable with CAN bus compatible Conergy components, such as Conergy SmartConnect. Conergy SmartControl also enables diagnostic and monitoring functions for these components. Furthermore, the system is extremely future-proof due to the simple upgrade options.

Continuous system monitoring

Conergy SmartControl periodically transmits the data required for monitoring, such as yields and the system efficiency, to the Internet portal. Here the data is converted into straightforward diagrams and stored. A constant target/actual analysis enables malfunctions to be detected in their initial stages. In such cases, a definable group of persons is notified immediately by e-mail, SMS or fax.



Precision remote diagnosis

The values and operating statuses of all connected components can be queried in real time via the ControlCenter. This means that system values down to string level can be monitored and individual inverters can be read out via remote diagnostics. This helps with error diagnosis and significantly reduces on site service work.



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Conergy ControlCenter software

Operating voltage	12–24 V _{DC}
Power consumption	3.5 W
Inputs	2 analogue inputs for temperature and irradiation sensor, SO pulse input in accordance with DIN 43864 for energy meter
Communication	Data modem (analogue/ethernet), CANopen interface for connecting the system components, RS 232 interface
Indicator elements	4 LED indicators for status and operating status
Data memory	Variable storage capacity of SD flash storage medium
Protection type	IP 20
Ambient temperature	–20 to +60 °C
Mounting	top DIN-rail
Dimensions (W × H × D)	45 × 99 × 114.5 mm

Irradiation and temperature sensor

Temperature measuring range	–40 to +100 °C, tolerance ± 2 K at 25 °C
Irradiation measuring range	0–1,400 W/m ² , non-linearity < 2 %, spectral sensitivity 400–1,100 nm
Dimensions (W × H × D)	40 × 95 × 110 mm

Power adapter

Mains input voltage	100–240 V _{AC} , 50/60 Hz
Output	7 W
Output voltage	12 V
Protection type	IP 20
Dimensions (W × H × D)	45 × 99 × 114.5 mm

Available from: