Conergy IPG C/CIS Central inverter

CONERGY

Our premier league.



The Conergy advantage: Conergy is the world's only provider of solar energy system solutions manufactured in-house.

Our premier league. Compact. High-performance. Superior workmanship.

The new Conergy IPG C central inverter. For solar energy systems from 100 kW.

Inverters are the nerve centre of every solar energy system. They convert the direct current generated by the solar modules into alternating current and feed power into the electricity grid. The new Conergy central inverters are particularly impressive due to their extremely high level of efficiency with particularly compact external dimensions and they are therefore exceptionally cost effective.

The high quality of the inverters, and of all other Conergy products, is the result of many years of developing and manufacturing all of the system components. Project development, implementation and the plant management of thousands of solar energy systems of all sizes throughout the world are also important factors in achieving high quality. Conergy possesses expertise and knowledge that is unique to the industry.

This expertise is also incorporated into our new generation of Conergy IPG C central inverters, which are ideally designed for systems from 100 kW through to multi-megawatt photovoltaic plants. They are characterised by extremely efficient operation, reliability over a long service life, planning flexibility and easy installation.

In addition to the outstanding products features, such as long-term high energy yields and associated high efficiency, the new Conergy IPG C series also has an integrated touchscreen. This screen allows you to quickly, easily and clearly programme all country-specific network parameters, effectively guaranteeing trouble-free operation in all European countries.





Extremely efficient operation

- Outstanding peak efficiency factor of up to 98.8 % for the highest possible yields
- Optimum energy yields also possible in low-light conditions
- Remote diagnosis via Internet using the integrated web server

Reliable over a long service life

- | Comprehensive service agreements and maintenance contracts for complete investment security
- High-quality component selection ensures long-term high reliability



- Suitable for use with nearly all module types and system configurations
- Satisfies all relevant European standards and guidelines for grid connection and can be used in all countries
- Occupies only a small amount of space thanks to its compact construction

• --- Easy to install

mage of Conergy IPG 200/300/350C

- Reduced installation effort thanks to the integrated generator junction box
- | Easy to commission
- | Easily adjustable via touchscreen
- Country-specific network parameter for the whole of Europe
- | IPG 250C with integrated transformer for direct connection to the low-voltage grid with simultaneous galvanic isolation

| | | | NEW |
|---|---------------------|-----------|-----------|
| Conergy IPG C series | IPG 200 C | IPG 300 C | IPG 350 C |
| Integrated transformer | No | No | No |
| Max. DC output | 260 kWp | 360 kWp | 400 kWp |
| Max. AC output | 200 kVA | 300 kVA | 350 kVA |
| Max. efficiency factor ¹ | 98.8% | 98.8% | 98.8% |
| European efficiency factor ¹ | 98.3% | 98.5% | 98.5% |
| Dimensions in mm (W x H x D) ² | 1,600 x 1,800 x 800 |) | |
| Weight (net) | 1,250 kg | | |

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| IPG 250 C | |
|---------------------|--|
| Yes | |
| 280 kWp | |
| 250 kVA | |
| 97.9 % | |
| 97.5 % | |
| 2,000 x 1,800 x 800 | |
| 2,300 kg | |
| | |

¹ At DC and AC rated voltage excluding auxiliary power.

² Including transport packaging, add 200 mm to the depth and 100 mm to the length and width of the devices; height with fan installed is 2,000 mm.

The champion.

The Conergy CIS 400–1400 central inverter station. Custom-made from L to XXL.

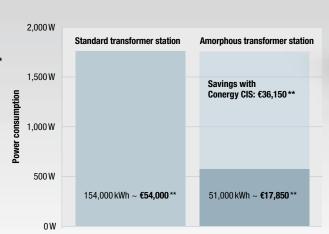
Conergy central inverter stations have a high level of flexibility and individualisation. They come fully preconfigured to meet your specific requirements and are ready to use upon delivery to the installation site.

After connection to the module array and the electricity grid, the central inverter station can be switched on immediately. All of the necessary components are installed into this compact weather-resistant light concrete station – from the central inverter and transformer switch gear to the monitoring systems. This manufacturing process provides maximum performance and long-term security: without exception, all relays, connections, junctions and the integrated protective system are pretested.

Complete solutions with an output power of 400 kW up to 1.4 MW can be fitted in 100 kW increments upward. Two concrete housings are available, which fit up to four of our new generation Conergy IPG C central inverters. This modular design provides a high degree of flexibility. Our customers receive an end product that is customised exactly to their needs and project requirements – with maximum performance and the highest level of reliability due to system components that are perfectly matched to each other.

More than 60% electricity savings due to the use of amorphous transformer stations*

Every solar energy system does not supply power to the grid for approx. 50 % of its service life, for example at night. In 20 years, this adds up to approx. 88,000 hours. However, the transformer stations do consume power in this time; the electricity meter turns backwards. The highly efficient amorphous transformer stations used by Conergy reduce this loss by approx. 60 %.



- * Integrated in the central inverter stations.
- ** At an assumed feed-in tariff of 35 ct per kWh. Example calculation information subject to correction.



Extremely efficient operation

- Outstanding peak system efficiency factor of up to $98.3\,\%$
- High-quality equipment with the newest central inverter technology from the Conergy IPG C series



Reliable over a long service life

- Complete station including design approval by Bureau Veritas
- Spaciously designed ventilation system with temperature-controlled fans
- Extremely reliable due to the system technologies that are perfectly tuned to each other

Planning flexibility

- Power layouts in 100 kW increments, from $400\,kW$ to $1.4\,MW$
- Designed according to customer specifications
- Satisfies all relevant European standards and guidelines for grid connection and can be used in all countries

Easy to install

- Completely preconfigured, ready-to-use central inverter station
- Including highly efficient transformer station, and direct grid connection
- Reduced transportation and installation effort

| | | | | | | | | NEW | | | NEW |
|--|-----------------------|---------|-----------------------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|
| Conergy CIS | CIS 400 | CIS 500 | CIS 600 | CIS 700 | CIS 800 | CIS 900 | CIS 1000 | CIS 1050 | CIS 1100 | CIS 1200 | CIS 1400 |
| Max. DC output | 480 kWp | 600 kWp | 720 kWp | 840 kWp | 960 kWp | 1,080 kWp | 1,200 kWp | 1,200 kWp | 1,320 kWp | 1,440 kWp | 1,600kWp |
| Max. AC output | 400 kVA | 500 kVA | 600 kVA | 700 kVA | 800 kVA | 900 kVA | 1,000 kVA | 1,050 kVA | 1,100 kVA | 1,200 kVA | 1,400 kVA |
| Max. efficiency factor ¹ | 98.1 % | 98.1 % | 98.1 % | 98.1 % | 98.1 % | 98.1 % | 98.1 % | 98.3% | 98.1 % | 98.1 % | 98.3% |
| European efficiency factor ¹ | 97.6% | 97.7 % | 97.8% | 97.6 % | 97.7% | 97.8% | 97.7% | 97.9% | 97.7 % | 97.8% | 97.9 % |
| Dimensions in mm (W x H x D) ² | 2,980 x 2,980 x 5,380 | | 2,980 x 2,980 x 6,980 | | | | | | | | |
| Weight (net) | 28t | | | 35t | | | | | | | |

¹ At DC and AC rated voltage excluding auxiliary power.
² Height dimensions excluding air outlet hoods; dimensions excluding special equipment; height for transport is 3.25 m.

The Conergy accessories.

For maximum efficiency in the solar energy system.

Conergy VisionBox.

The Conergy VisionBox is the professional system-monitoring system with extensive functions for data analysis, fault diagnosis and automatic alarms.

- | Ideal for solar energy systems from 3 kW up to 18 MW
- Monitors up to 60 Conergy IPG inverters and/or Conergy SmartConnect
- Reports faults automatically via the display and LEDs. You can also choose to have the alarms sent via SMS, fax or e-mail
- Offers worldwide access to all data via PC or Smartphone using the web portal www.sunreader.de
- Has a standard USB connection for simple data transfer and software updates

The Conergy VisionBox app for your iPhone can now be used to monitor your system easily while you are on the move.





Conergy SmartConnect.

The Conergy SmartConnect brings together up to eight module strings, each with a max. of 20 A, and routes them securely to the Conergy IPG C or to Conergy CIS. The Conergy SmartConnect also enables accurate and clear monitoring of strings using a safety concept that is adapted to PV technology.

- | Simple module string connection to the inverter with integrated monitoring
- | Transmits the operating data continuously to the Conergy VisionBox (accessory)



Conergy GridControl.

Conergy GridControl is the interface between the solar power station and the grid operator. With this interface, the grid operator can easily remotely control the output of photovoltaic systems with more than 100 kW, as required.

- Processes both analogue and digital control signals from the grid operator
- The output interventions made by the grid operator can be documented in the logbook of Conergy VisionBox

Conergy maintenance contract.

Two maintenance services ensuring maximum availability.

The Conergy maintenance contract guarantees that the inverters are serviced by trained technicians and ensures high yields over a long service life.

The contract includes maintenance twice a year and availability as required. The contract period is 20 years, but can be cancelled at any time. There are two maintenance services available for cost control: either service work is billed separately according to order and at cost. Or working hours, travel costs and material are included and paid for through a fixed rate.

Conergy Services.

One service, two areas of service provision, everything under control.



Conergy offers you a service product that includes plant management of large and medium-sized solar energy systems with a commercial and technical power spectrum.

- We carry out all of the technical inspections and maintenance procedures at the required intervals
- We accurately monitor and control the efficiency of the solar energy system towards the highest possible yield



The Conergy solar system:

High-quality solar energy systems "Made by Conergy".

Conergy is a pioneer in the solar industry and, as a global player, the world's only provider of solar system solutions that are manufactured in-house.

The high quality level of the photovoltaic systems from Conergy is verified in regular quality control checks. Photovoltaic systems made in-house at Conergy have already proven themselves thousands of times in practice and are used around the world under the most diverse conditions.

We invest this experience in the day-to-day development of our systems. This results in photovoltaic systems that have the best possible yield, an extremely long service life and low maintenance costs.



OUR WORLD IS FULL OF ENERGY.

CONERGY

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Subject to technical modifications without notice