

Conergy IPG S string inverters

Power packs



Extremely high-yield: A top efficiency level of 97.7 % produces a high-performance photovoltaic system.

Every system operator wants the same thing: one investment, one installation. And then enjoy the maximum system yield. In any weather, in any environment. Sounds simple. And it is.

We have designed the transformerless single-phase supply string inverters in the Conergy IPG S series to meet these needs perfectly. A Conergy IPG S inverter supplies reliably high yields, is designed for a long service life, can be flexibly configured for various system layouts and is easy to install and maintain.

To achieve this, the development team has employed all of its expertise and has developed and perfected many new features, such as our patented **CTL topology:** We have optimised our circuits, increased the top efficiency level to as much as 97.7 % and reduced the MPP tracking reaction times to just a few seconds.

Therefore, even in cloudy weather, the inverter always operates at the optimum working point with the best possible energy yield.

The same applies to our innovative **PowerCool concept.** In an ambient temperature of between -20° C and $+60^{\circ}$ C, it allows the optimum conversion of direct current into alternating current. This means extremely high-yield performance throughout the year.

5 strengths for increased yield:

- Up to 97.7 % top efficiency level, up to 97 %European efficiency level provides an excellent yield
- | Split second MPP tracking: The inverter always runs at maximum capacity, thanks to quick reaction to changing weather conditions, e.g. clouds
- Fificient cooling with PowerCool results in a consistently high output and ensures a long service life
- Optional extension of the product warranty to up to 20 years provides long-term investment security
- Protection type IP65 underlines the high-quality workmanship and ensures reliable system operation – even in dusty environments



One series – three device sizes: 3 kW, 4 kW and 5 kW. For small to medium-sized systems.

This is what the technical magazine PHOTON had to say about the Conergy IPG 5 S:

"As a very flexible, compact and light inverter with an excellent PHOTON efficiency level, [it is able to] score lots of points and place itself among the best devices that we have tested to date."

Source: PHOTON - Das Solarstrom-Magazin 8/2009







Extremely powerful:

The single-phase Conergy IPG S series string inverters are ideal for small to medium-sized systems.



Extremely simple:

Free choice in planning, module selection and connection.

We have also tested and reworked everything just to make it easy for you: three performance levels, a wide input voltage range, the use of thin-film or crystalline modules – the Conergy IPG S series offers you almost unlimited combination options. And of course they work perfectly with the three-phase inverters in the Conergy IPG T series, enabling even more flexibility in medium-sized systems.

And because you should have freedom of choice as to where you install the string inverter, it meets the high requirements of protection type IP 65. So, whether you install the Conergy IPG S series inside, outside, in dusty, dry or damp environments, it runs and runs and runs.

5 strengths for flexible planning and easy installation:

- An extraordinarily wide input voltage range (up to 940V max. DC voltage) allows great flexibility for module connection
 - **Time and cost savings in installation:** systems with an output of up to 5 kWp can be achieved with just one string. This reduces the cabling work (fewer parallel strings). In addition, a DC load disconnector is already integrated in the device
- Approved for thin-film and crystalline modules: enables more flexible system planning
- High protection type IP65 and innovative PowerCool cooling concept: reliable operation even in demanding ambient conditions and temperatures between -20° C and $+60^{\circ}$ C
- Relatively low weight: can be easily installed by just one person



Compare for yourself:	the figures are	e in favour of Conergy.

Product characteristic	Conergy IPG 5 S	Competitor A	Competitor B	Competitor C	Evaluation Conergy	Conergy advantage
Max. efficiency level	97.7 %	97.0%	96.0%	96.3%	•	Highest value in comparison
European efficiency level	97.0 %	96.5%	95.1 %	95.3%		Highest value in comparison
MPP voltage	275-750V	125-440V	230-500V	350-600V		Wide MPP voltage range: optimum design possible
Max. DC voltage	940V	550V	600 V	800 V		Highest input voltage range in comparison
Protection type	IP 65	IP 54	IP 44	IP 54		Highest protection type: confirms the high-quality workmanship
Weight	22 kg	25 kg	25 kg	28 kg		Low weight: for easier handling and simpler installation

Conergy VisionBox. The efficient monitoring system for photovoltaic systems. **Reliable.**

The Conergy VisionBox is a new type of monitoring system which efficiently and conveniently controls solar energy systems.

- Ideal for all solar energy systems from 3 to 300 kW
- Automatic error reports via display and LEDs. Furthermore various alarms can also be issued via SMS, fax or e-mail.
- Any combination of up to 20 inverters in the Conergy IPG S and Conergy IPG T series can be monitored by the Conergy VisionBox.
- An integrated web server allows the system to be monitored from any PC with Internet access.
- For extensive archiving or detailed analysis, all data can be saved onto a USB stick and processed on the PC.

The Conergy VisionBox can be supplied as an accessory for all Conergy IPG string inverters.



Our solar system: High-quality photovoltaic systems from Conergy.

Conergy provides high-quality photovoltaic solutions which are made in Germany to strict quality standards, all from one source.

The high level quality of the photovoltaic systems from Conergy is verified by regular quality control checks. Photovoltaic systems made by Conergy have already proven themselves thousands of times in practical use and are used world-wide in various applications.

We invest this experience in the day-to-day development of our photovoltaic systems. All components in these systems are perfectly matched to each other and therefore ensure increased reliability, long-term high yields, a maximum operating life and low maintenance requirements.



OUR WORLD IS FULL OF ENERGY.



Subject to technical modifications without notice



Conergy AG Anckelmannsplatz 1 20537 Hamburg Germany info@conergy.de

C Supplier:

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