The central inverters (3-phase) of the Conergy IPG series are packed with innovative, cutting-edge technology. Their optimised efficiency factor covers the entire performance spectrum and the high technical availability factor has been achieved by proven long-life components and the latest control procedures.

The exceptionally service-friendly and low-maintenance inverters are available in performance classes of 40, 60, 80, 100, 110 and 280 kW.

Excellent efficiency
The inverters of the Conergy IPG series achieve their distinguished efficiency factor through the use of IGBTs (Insulated Gate Bipolar Transistors) with Trench Gate Structure, and through the use of iron powder chokes and high quality transformers with losses less than 1 %.

High availability factor
The design of the technical parameters has been optimised with regard to the operating time of the inverter. For example, the IGBTs not only increase the efficiency factor, but their high dielectric strength inhibits the transmission of voltage spikes. The intelligent minimum-performance recognition system protects the AC contactors and a fast over-current recognition system for all transistors protects the IGBTs.

Highest feed-in quality
All the Conergy IPG series inverters exhibit a distortion factor of less than 2 %. This means the current generated by the inverters is “cleaner” than the current in most public power grids.

Flexible equipment configuration
With a wide range of input voltages from 493 to 965 V, the IPG series allows the largest possible range of module connection possibilities. For larger installations, all of the Conergy IPG series inverters can be easily combined to provide higher performance.

Ease of installation
The Conergy IPG series inverters are only 180 cm high. This allows easy transport through any door and mounting in every type of compact concrete substation. As well as this, the footprint of the inverters has been kept very small. The central inverters do not need to be adjusted after installation.
### Recommended solar generator connected load (25 °C)
110 kWp

### Output power
100 kW

### Maximum efficiency factor
96.0 %

### European efficiency factor
95.2 %

### Input voltage range
Vpmin = 493 VDC to Vocmax = 965 VDC

### MPP range at DC rated output
493–780 VDC

### Input current
223 ADC

### Output voltage range
196–253 VAC (standard setup) adjustable for other country standards

### Mains frequency range
49.8–50.2 Hz (standard setup) adjustable for other country standards

### Stand-by performance
49 W

### Nighttime performance
49 W

### Output current distortion
2 % at 100 kW

### AC outputs
5 connectors (L1, L2, L3, N and PE)

### DC inputs
4

### Automatic turn-on
When sufficient solar generator power is available

### Resetting time after AC deactivation
Min. 2 min

### Overload behaviour
Performance limiting

### DC voltage ripple
2 %

### Operating mode
Maximum Power Point Tracking (> 1 % accuracy)

### Ground fault monitoring
Yes

### Reverse polarity protection
Short circuit diodes on the PV side

### Overvoltage protection
High performance varistors

### Performance factor Cos Phi
1

### Solar generator/mains decoupling
High insulation transformer

### Maximum performance of auxiliary supply
278 W

### Recommended series fuse for auxiliary supply
10 A

### Ambient temperature range
0–45 °C

### Relative humidity
95 % non-condensing

### Housing colour
Conergy Brand Blue

### Protection type
IP 20

### Fan flow
1,385 m³/h

### Weight
990 kg

### Dimensions (W x H x D)
1,210 x 1,970 x 880 mm

### Dimensions Conergy IPG compact (W x H x D)
1,210 x 1,800 x 800 mm

### Connector dimensions:
- **L1, L2, L3, N, SG+, SG-**
  - Connection bolts M12
- **PE**
  - Connection bolts M12
- **Auxiliary supply**
  - Terminals 1.5–2.5 mm²

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For further information: www.conergy.com

Subject to technical changes

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