



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 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 965V, 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 180cm 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 (STC)	100 kWp
Output power	90 kW
Maximum AC power	90 kW
Maximum AC current	153 A
Maximum efficiency factor	96.6 %
European efficiency factor	96.2 %
Input voltage range	$V_{Pmin} = 493 V_{DC}$ to $V_{OCmax} = 965 V_{DC}$
MPP range at DC rated output	493–780 V_{DC}
Input current	203 A_{DC}
Output voltage range	196–253 V_{AC} (standard setup) adjustable for other country standards
Mains frequency range	49.8–50.2 Hz (standard setup) adjustable for other country standards
Required grid format	all TN grids
Stand-by performance / nighttime performance	49 W
Output current distortion	< 2 %
AC outputs	5 connectors (L1, L2, L3, N and PE) / connection bolts M12
DC inputs	4 / connection bolts M12
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 (> 99 % 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
Auxiliary supply	230 V / 50 Hz / max. 300 W / terminals 1,5–2,5 mm ²
Recommended series fuse for auxiliary supply	10 A
Ambient temperatur range	–20 °C up to +45 °C
Relative humidity	95 % non-condensing
Housing colour	Conergy Brand Blue
Protection type / protection class	IP 20 / I
Fan flow	1,385 m ³ /h
Weight	1,220 kg
Dimensions (W × H × D)	1,210 × 1,800 × 800 mm

Available from: