



Conergy IPG S-Serie

The string inverters of the new Conergy IPG S-Series set new standards. They are the result of Conergy many years of experience in the development of photovoltaic inverters, and meet the highest demands for efficiency and reliability.



- | Highest yields due to a maximum efficiency factor of 97,7 %
- | Extended ambient temperature range of -20° to $+60^{\circ}$
- | High flexibility in the choice of modules and wiring due to a large input voltage range of 200V to 900V
- | Investment protection: warranty up to 20 years

Efficiency

Thanks to innovative patented **VTL topology**, the inverters can reach peak efficiency factors of 97.7%. The new technology also ensures that maximum efficiency factors are reached, even at minimal voltages. The exceptionally fast and precise MPP tracking guarantees that there is no loss of output in case of irradiation changes.

Reliability

The new patented **PowerCool** cooling concept optimises heat distribution in the inverter. In this way, the sophisticated cooling system prevents premature ageing of the power electronics. The high-quality components and protection type IP 65 guarantee maximum service life for the inverter.

Flexibility

Because of the wide input voltage range of the Conergy S-Series (U_{DC} up to 900V), modules can be flexibly wired. The high input voltage means maximum string lengths for low string losses and cost-effective photovoltaic module connections.

At home in any environment

Protection type IP 65 and the ambient temperature range of -20°C to $+60^{\circ}\text{C}$ means that the inverters can be installed in practically any environment.



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	Vollwerk VS series		
DC input	Conergy 3S	Conergy 4S	Conergy 5S
MPP voltage range	250–750V	250–750V	275–750V
Max. DC voltage	900V	900V	900V
Max. DC current	19A	19A	19A
MPP trackers	1	1	1
Number of DC inputs	1	1	1
DC connection	MCIV compatible	MCIV compatible	MCIV compatible
DC overload behaviour	The operating point shifts on the solar power system characteristic curve		
AC output			
Supply	Single-phase	Single-phase	Single-phase
AC connection	Plug	Plug	Plug
Mains voltage ¹	184–264 V _{AC}	184–264 V _{AC}	184–264 V _{AC}
Required grid type	all TN grids, TT grid	all TN grids, TT grid	all TN grids, TT grid
Frequency ¹	47.5–50.2Hz	47.5–50.2Hz	47.5–50.2Hz
AC output (max.)	3 kW	4 kW	5 kW
AC output (rated)	3 kW	4 kW	5 kW*
Distortion factor	< 3 %	< 3 %	< 3 %
Max. output current	14A	19A	22A
Efficiency factor			
Max. efficiency factor	97.5 %	97.6 %	97.7 %
European efficiency factor	96.4 %	96.8 %	97.0 %
Protective equipment			
Protection type	IP 65	IP 65	IP 65
Earth fault monitoring	Yes	Yes	Yes
DC overvoltage protection	Varistors and spark gaps		
DC reverse polarity protection	Short circuit diodes at DC input		
General data			
Display	LCD	LCD	LCD
Inverter communication	CAN bus	CAN bus	CAN bus
Data storage capability	1 month	1 month	1 month
Weight	22 kg	22 kg	22 kg
Cooling	PowerCool	PowerCool	PowerCool
Ambient temperature	–20 °C to +50 °C / up to +60 °C with derating		
Dimensions (W × H × D)	390 × 675 × 229 mm		
Night Power consumption	< 0.2W	< 0.2W	< 0.2W
Topology	transformerless	transformerless	transformerless
Warranty period	5 years (optionally 10/15/20 years)		
Certificates	GS, CE	GS, CE	GS, CE

¹ Varies according to country setup

Available from: