

EV Charging Single Phase Inverter

for Australia

SE5000H



INVERTERS

2-in-1 EV Charger and Solar Inverter, Speeds Up Installation and EV Charging

- Combines solar and grid power for faster EV charging
- Maximises self-consumption and optimises use of renewable energy
- An EV-ready solution, futureproofed for new EV purchase or replacement
- Small, lightweight and easy to install indoors or outdoors
- Record-breaking 99% efficiency, powered by HD-wave technology
- Designed to work with SolarEdge power optimisers
- Built-in module-level monitoring
- Flexible selection of charger cable types and lengths

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INVERTER SPECIFICATIONS:

SE5000H		
OUTPUT		
Rated AC Power Output	5000	VA
Max. AC Power Output	5000	VA
AC Output Voltage (Nominal)	220 / 230	Vac
AC Output Voltage Range	184 - 264.5	Vac
AC Frequency (Nominal)	50 / 60 ± 5	Hz
Maximum Continuous Output Current	23	A
Total Harmonic Distortion (THD)	< 3	%
Power Factor	1, adjustable -0.8 to 0.8	
Utility Monitoring, Islanding Protection, Country Configurable Thresholds	Yes	
INPUT		
Maximum DC Power	7750	W
Transformer-less, Ungrounded	Yes	
Maximum Input Voltage	480	Vdc
Nominal DC Input Voltage	380	Vdc
Maximum Input Current	13.5	Adc
Reverse-Polarity Protection	Yes	
Ground-Fault Isolation Detection	600k Ω Sensitivity	
Maximum Inverter Efficiency	99.2	%
European Weighted Efficiency	99	%
Nighttime Power Consumption	< 2.5	W
ADDITIONAL FEATURES		
Supported Communication Interfaces	RS485, Ethernet, ZigBee for Smart Energy ⁽¹⁾ (optional), Wi-Fi (requires antenna) ⁽²⁾ , Cellular (optional)	
Smart Energy Management	Export Limitation and Excess Solar Charging ⁽³⁾	
Inverter Commissioning	with the SetApp mobile application using built-in Wi-Fi access point for local connection	
STANDARD COMPLIANCE		
Safety	IEC62109, AS/NZS3100	
Grid Connection Standards	AS/NZS4777:2015	
Emissions	IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12, FCC Part 15 Class B	
INSTALLATION SPECIFICATIONS		
AC Output Conduit Size / Wire cross section	25mm Maximum / 1-13 mm ²	
DC Input Conduit Size / # of Strings / Wire cross section	25mm Maximum / 1-2 strings / 1-13 mm ²	
Dimensions with Connection Unit with Safety Switch (HxWxD)	450 x 370 x 174	mm
Weight with Connection Unit with Safety Switch	11.4	kg
Noise	<25	dBA
Cooling	Natural Convection	
Operating Temperature Range	-40 to +60 ⁽⁴⁾	°C
Protection Rating	IP65 — Outdoor and Indoor	

⁽¹⁾ For more information refer to: <https://www.solaredge.com/sites/default/files/se-zigbee-plug-in-wireless-communication-for-setapp-datasheet-au.pdf>

⁽²⁾ Wi-Fi connectivity requires an external antenna. For more information refer to: <https://www.solaredge.com/sites/default/files/se-wifi-zigbee-antenna-datasheet.pdf>

⁽³⁾ Import/Export meter is required for Export Limitation and for controlled Excess Solar charging

⁽⁴⁾ Full power up to at least 50°C/122°F. For power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note.pdf>

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EV CHARGER AND EV CHARGER CABLE SPECIFICATIONS:

OUTPUT — AC (EV CHARGER)		
Charging Mode	AC Level 2 / Mode 3	
Minimum Charge Rate ⁽⁵⁾	1.5	kW
Rated AC Power Output (grid & PV) ⁽⁶⁾	7400	W
Nominal AC Output Voltage	230	Vac
Nominal AC Frequency	50 / 60	Hz
Maximum Continuous Output Current @230V (grid & PV)	32	Aac
Residual Current Detector (AC)	30	mA rms
ADDITIONAL FEATURES		
EV Charger Status LEDs, Fault Indicator	Yes	
EV Charger Ground Connection Monitoring	Yes, continuous	
EV Charger Configuration	Via the monitoring app; Ethernet or Wi-Fi connection is required ⁽⁷⁾	
EV Charger Unplugging Detection	Yes, current termination according to IEC62196	
STANDARD COMPLIANCE		
Safety	IEC 61851, IEC 62752:2016	
EV Charger	IEC 62196	
INSTALLATION SPECIFICATIONS		
EV Charger Connector	IEC 62196 Type 1 or Type 2	
EV Charger Cable Length ⁽⁸⁾	7.6 (4.5 option)	m
EV Charger Cable Weight	5.7 (3.5 for 4.5m option)	kg
EV Charger Cable Operating Temperature Range	-30 to +50	
Protection Rating (connected to EV or with dust cap)	IP54	

⁽⁵⁾ Minimum charge rate is in compliance with IEC61851-1 and J1772™ FEB2016 standards.

⁽⁶⁾ Minimum charge rate 1.5kW

⁽⁷⁾ Cellular connection may be used; requires a SIM card with a 1GB data plan that should be purchased from a cellular provider

⁽⁸⁾ EV charger cable ordered separately