



SOLAREGE EV CHARGING SINGLE PHASE INVERTER

The world's first EV charging inverter

Increase your revenue and expand your customer's PV usage with the SolarEdge EV charging single phase inverter. Whether your customer owns an EV now or just wants to be EV-ready, get ready to drive your business into the future with SolarEdge.

The SolarEdge EV charging inverter enables homeowners to charge their electric vehicles directly from the power of the sun, which can maximize their use of renewable energy, and can reduce their carbon footprint and electricity bills. The inverter ranges up to 6kW, and provides users with the ability to charge EVs up to 2.5 times faster than a standard EV charger through an innovative solar boost mode that utilizes grid and PV charging simultaneously.

By installing the SolarEdge EV charging single phase inverter, your customers also benefit from the reduced hassle of installing separately a standalone EV charger and a PV inverter, as well as integration with the SolarEdge monitoring platform.

solaredge

KEY BENEFITS



Combines sun and grid power for charging up to 2.5 times faster than standard EV chargers



Fully integrated with the SolarEdge monitoring platform



Reduces workload and costs of installing a standalone EV charger and a PV inverter



Built-in meter enables separate tracking of EV power usage for visibility and control



An EV-ready solution, future-proofed for new EV purchase or replacement, and compatible with multiple EV connectors



12-year warranty⁽¹⁾, extendable to 20 or 25 years



Maximizes self-consumption by using excess PV for EV charging



Demand-response ready

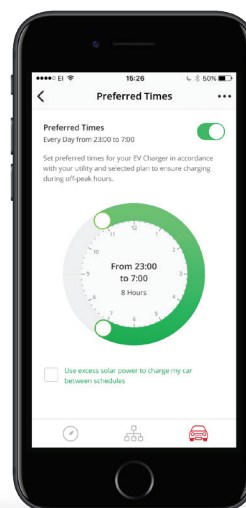
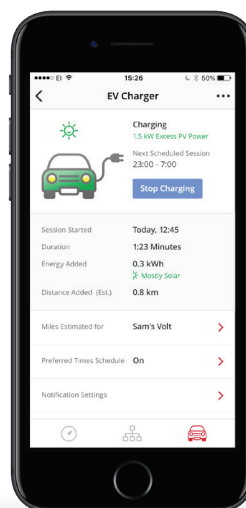
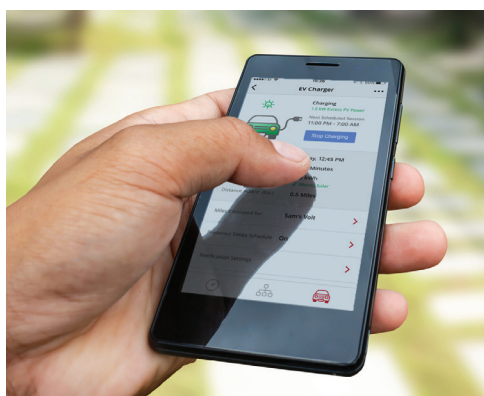


FULL VISIBILITY AND CONTROL

The SolarEdge EV charging single phase inverter supports full network connectivity and integrates seamlessly with the cloud-based SolarEdge monitoring platform. Homeowners can track their charging status, control vehicle charging, and set charging schedules.

FEATURE HIGHLIGHTS

- > Smart-scheduling for use with Time of Use (TOU) rates — charge from the grid during off peak hours
- > Track PV, EV, and grid consumption for visibility and control of household energy usage
- > Remote operation via mobile app — turn charging on and off directly from your smartphone
- > View charging duration, charge energy, and percent charge from PV



EV CHARGING COMPARISON

	Standard EV Charger (2.7 kW 12A@230Vac)	SolarEdge EV Charger Mode 3 with Solar Boost Mode Charging speed depends on PV production (Maximum 7.4kW 32A@ 230Vac) ⁽²⁾
Added kilometers per 1 hour of charging ⁽³⁾	8 to 15 kilometers	35 to 40 kilometers
Charge time for daily commute ⁽³⁾	4 to 8 hours	1 to 1.5 hours

¹ Cable and connector are not included

² Check your car manual for maximum charge rate

³ Assuming 5 km/kWh and with a EU household average driving distance of 50 km per day
(sources: <https://setis.ec.europa.eu/related-jrc-activities/jrc-setis-reports/driving-and-parking-patterns-of-european-car-drivers>)

EV Charging Single Phase Inverter

SE3680H, SE5000H



INVERTER SPECIFICATIONS:

	SE3680H		SE5000H	
OUTPUT — AC (LOADS / GRID)				
Rated AC Power Output	3680		5000 ⁽¹⁾	
Maximum AC Power Output	3680		5000 ⁽¹⁾	
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	16		23	
Utility Monitoring, Islanding Protection, Country Configurable Thresholds	Yes		A	
INPUT — DC				
Maximum DC Power	5700		7750	
Transformer-less, Ungrounded	Yes		W	
Maximum Input Voltage	480		Vdc	
Nominal DC Input Voltage	380		Vdc	
Maximum Input Current	10.5		13.5	
Reverse-Polarity Protection	Yes		Adc	
Ground-Fault Isolation Detection	600kΩ Sensitivity			
Maximum Inverter Efficiency	99.2		%	
European Weighted Efficiency	98.8		%	
Nighttime Power Consumption	< 2.5		W	
ADDITIONAL FEATURES				
Supported Communication Interfaces	RS485, Ethernet, ZigBee (optional), Wi-Fi (optional), Cellular (optional)			
STANDARD COMPLIANCE				
Safety	IEC-62109-1/2			
Grid Connection Standards	AS-4777, VDE-AR-N-4105, VDE 0126-1-1, UTE C15-712, G83/2, G59/3, CEI-021, EN 50438, IEC61727, IEC62116, ÖNORM, TF3.2.1, C10-11, NRS 097-2-1			
Emissions	IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12, FCC Part 15 Class B			
INSTALLATION SPECIFICATIONS				
AC Output — Supported Cable Diameter	9 - 16		mm	
AC — Supported Wire Cross Section	1 - 16		mm²	
DC Input	1 x MC4 pair		2 x MC4 pair	
Dimensions with Connection Unit (H x W x D)	280 X 370 X 142		mm	
Weight with Connection Unit	7.8		kg	
Noise	<25		dBA	
Cooling	Natural Convection			
Operating Temperature Range	-20 to +60 ⁽²⁾ (-40°C option)		°C	
Protection Rating	IP65 — Outdoor and Indoor (inverter with connection unit)			

⁽¹⁾ 4600VA in Germany

⁽²⁾ For power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note.pdf>

EV CHARGER AND EV CHARGER CABLE SPECIFICATIONS:

OUTPUT — AC (EV CHARGER)		
Charging Mode	AC Mode 3	
	Connection to the SolarEdge monitoring platform is required for first EV charging	
Rated AC Power Output (grid & PV)	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	5	mA
ADDITIONAL FEATURES		
EV Charger Status LEDs, Fault Indicator	Yes	
EV Charger Ground Connection Monitoring	Yes, continuous	
EV Charger Configuration	Via the monitoring app; Ethernet, Wi-Fi or ZigBee connection is required ⁽³⁾	
STANDARD COMPLIANCE		
Safety ⁽⁴⁾	IEC61851	
EV Charger	IEC62196	
INSTALLATION SPECIFICATIONS		
EV Charger Connector	IEC 62196 Type 1, Type 2	
EV Charger Cable Length ⁽⁵⁾	7.6 (4.6 option)	m
EV Charger Cable Weight	5.7 (3.5 for 4.6m option)	kg
EV Charger Cable Operating Temperature Range	-30 to +50	°C
Protection Rating (connected to EV or with dust cap)	IP54	

⁽³⁾ Cellular connection may be used; requires a SIM card with a 1GB data plan that should be purchased from a cellular provider

⁽⁴⁾ Pending certification

⁽⁵⁾ EV charger cable ordered separately



RoHS