

SolarEdge ONE EV Charger

For Europe, Australia, and New Zealand

SMART ENERGY



Residential and commercial EV charging solution that seamlessly integrates with the full SolarEdge ecosystem

- Use excess PV with smart schedule supporting dynamic ToU – automatically charges in the cheapest hours (solar-first when available), while ensuring the required energy is delivered on time*
- Peak shaving and surge protection as part of the import limit
- Suitable for single and three phase installations, both indoor and outdoor
- Flexible charger that uses a socket or tethered options by permanent cable lock
- Supports charging authentication using the built-in RFID reader, mobile app, ISO 15118, or simple plug-and-play
- Control and monitoring via SolarEdge apps, including remote operation, updating charging schedules, and viewing charging history
- Optional MID meter**
- Sleek, compact design with an installation-friendly, snap-on mounting for rapid setup

* For sites with a SolarEdge Home Wave or Hub Inverter and the SolarEdge Home Batteries 400V or 48V.

** Available with the SolarEdge ONE EV Charger Pro model only.

/ SolarEdge ONE EV Charger

	SolarEdge ONE EV Charger EVN22B	SolarEdge ONE EV Charger Pro EVN22P	Units
SPECIFICATIONS			
AC Grid Phase Connection	1 or 3 phases Auto-switching for excess PV charging		
Rated AC Power Output	Up to 22		kW
Rated Current (per phase)	6 – 32		A
Nominal AC Output Voltage	3 X 230 / 400 (±10%)		VAC
Line Frequency	50		Hz
Mains Forms	TN / TT / IT Multiple Earther Neutral (MEN) for Australia		
EV Socket Type	Type 2: Up to 32 A / 400 V AC in accordance with EN 62196-1		
Charge Mode	Mode 3 in accordance with IEC 61851-1 AC charging		
Over-Voltage Category	III, in accordance with EN 60664-1		
Protection Class	IP54		
Mechanical Protection Class	IK10		
Residual DC Detecting Device	RDC-DD (6 mA DC) according to IEC 62955		
AC TERMINALS			
Cable Feed	Top, Back, or Bottom		
AC Terminal Cross-Section Support	0.2 – 16		mm²
AC Cable Stripping Length	12		mm
AMBIENT CONDITIONS			
Installation Environment	Indoor and outdoor		
Operating Temperature	-30 to +50		°C
Storage Temperature	-40 to +70		°C
Working Air Humidity	5 to 80 (non-condensing)		%
Working Altitude	Maximum 2000 above sea level		m
CONNECTIVITY			
WiFi	IEEE 802.11 b/g/n, 2.4 GHz		
Ethernet	RJ45		
Built-in eSIM	–	LTE / 2G / GPRS ⁽¹⁾	
Bluetooth	BLE 4.2		
RFID Reader	ISO / IEC 14443 Type A		
OCPP Support	OCPP 1.6J		
ISO 15118	Hardware-ready		
ENERGY METERING			
Energy Meter	Built-in meter	MID Class B according to EN 50470-3	
Energy Meter Display	–	Built-in meter OLED display	
STANDARD COMPLIANCE			
CE Declaration of Conformity	Yes		
EU Standard Compliance	IEC 61851-1:2019; IEC 61851-21-2:2021 EU Type Examination Certificate (Module B) confirming compliant with: 2014/53/EU (RED) 2014/35/EU (LVD) 2014/30/EU (EMC) 2011/65/EU (RoHS)	IEC 61851-1:2019; IEC 61851-21-2:2021 EU Type Examination Certificate (Module B) confirming compliant with: 2014/53/EU (RED) 2014/35/EU (LVD) 2014/30/EU (EMC) 2011/65/EU (RoHS) 2014/32/EU (MID) EU Type Examination Certificate (Module D) confirming compliant with 2014/32/EU (MID)	
INSTALLATION SPECIFICATIONS			
Compatible SolarEdge Inverters	SolarEdge Home Hub Inverters, SolarEdge Genesis Inverters, SolarEdge Nexis Inverters, SolarEdge Residential Three Phase Solar Inverters, SolarEdge Three Phase Inverters (SE15K to SE33.3K), SolarEdge Three Phase Inverters with Synergy Technology (SE50K to SE100K)		
Residential Installations ⁽²⁾	MySolarEdge App		
Commercial Installations	ONE EV for C&I		
Dimensions (Height x Width x Depth)	235 x 230 x 107		mm
Weight	2.3		kg
⁽¹⁾ Cellular connectivity plans can be purchased separately through the ONE EV platform. Not applicable for Australia and New Zealand. ⁽²⁾ Only for residential firmware 4.24.22 or higher, excluding 4.xx.5xx.			
ORDERING INFORMATION			
PART NUMBER	DESCRIPTION		
SE-EVN22SE0-01	SolarEdge ONE EV Charger, 22kW, Socket, WiFi, Ethernet, RFID, ISO 15118		
SF-EVN22SEM-01	SolarEdge ONE EV Charger Pro, 22kW, Socket, WiFi, Ethernet, RFID, MID, LTE, ISO 15118		