

SolarEdge ONE EV Charger

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
- MID meter
- Sleek, compact design with an installation-friendly, snap-on mounting for rapid setup

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

SolarEdge ONE EV Charger

Model Number	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	mm ²
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	
Bluetooth	BLE 4.2	
RFID Reader	ISO / IEC 14443 Type A	
OCPP Support	OCPP 1.6J	
ISO 15118	Hardware-ready	
ENERGY METERING		
Energy 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) 2014/32/EU (MID) EU Type Examination Certificate (Module D) confirming compliant with 2014/32/EU (MID)	
INSTALLATION SPECIFICATIONS		
Compatible SolarEdge Inverters	SolarEdge Residential Single Phase Inverters, SolarEdge Residential Three Phase Inverters (up to 17K ⁽²⁾), SolarEdge Home Hub Inverters, SolarEdge Genesis Inverters, SolarEdge Nexis Inverters	
Supported Regions	Europe, Australia, New Zealand, and India	
Residential Installations ⁽¹⁾	mySolarEdge App	
Commercial Installations ⁽²⁾	ONE for EV	
Dimensions (Height x Width x Depth)	235 x 230 x 107	mm
Weight	2.3	kg

(1) Only for residential firmware 4.24.22 or higher, excluding 4.xx.5xx.

(2) For commercial applications, see [here](#).

ORDERING INFORMATION	
PART NUMBER	DESCRIPTION
SE-EVN22SEM-02	SolarEdge ONE EV Charger Pro, 22kW, Socket, WiFi, Ethernet, RFID, MID, ISO 15118