SEED180 V2G

180KW DC Vehicle to Grid fast charger

- Energy flowing from AC Grid to EV and back from EV to GRID
- Configurable single or dual outlet: CCS combo (1 or 2) and CHAdeMO,
- AC→DC output: power up to 180 kW, 440A@400V (587A@300Vdc), 150-1000Vdc
- DC→AC output: 440A@400Vdc dc input current (587Amax@300Vdc), power up to 180KW, 265Aac, 260 – 530 Vac 3ph+N, 45-65 Hz
- V2L - Vehicle to Load (OFFGRID mode)
- OCPP 1.6 integration
- Highly reliable and safe, resistant and anti-vandal
- Low maintenance, low energy consumption
- Easy to install, easy to use
- Compact and stylish italian design
- Customizable for branding

The SEED180-V2G charging station is designed both to supply power to EV's and also to allow electric vehicles to supply power to the public or domestic power grid, allowing getting benefits from different grid applications: Time shift, Power balancing and Power quality support

In DC to AC mode max power is 180KW, 440A@400Vdc max DC input current from EV CCS or CHAdeMO vehicles with V2G function.

In DC to AC mode power factor can be widely adjusted: lead 0.8 ~ lag 0.8.

It also allows V2L (Vehicle to Load) function in OFFGRID mode

SEED180-V2G is a 180 KW configurable multi-standard DC charging station CCS combo 2 and/or CHAdeMO

SEED180-V2G supports 400 Vdc and 920 Vdc voltage range, adjusting max current in function of the voltage: max 440A at 400V (Only CCS), max 180A at 1000Vdc..

SEED180-V2G has been designed keeping in mind the needs of the owner of the electric vehicle and those of the operator: safety, ease of use and speed in charging operations, low install cost, reliability, low maintenance, low consumption, scalability, quick assistance and support. Internet connection and OCPP integration allow users and operators to easily connect and operate with the charger through different back-office software systems, payment platforms or smart grid systems.

SEED180-V2G can be customized with logos and special stylish colour combinations: i.e. glossy black and aluminium, champagne and dark grey or orange and aluminum.

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Specifications

AC to DC Mode	**AC Input**	Input voltage & current range	400/480Vac, 3L+PE; 0~ 360A
		Input voltage/frequency range	260 Vac ~ 530 Vac, 45 Hz~ 65 Hz
		Power factor	≥0.99 Full-load output power of@50% ~ 100%
		THD	≤ 5% Full-load output power of @50% ~ 100%
	DC Output	Rated power	180KW
		Voltage and current range	150Vdc ~ 1000Vdc, 0~ 440A@400Vdc (0~ 587Amax@300Vdc) (CHAdeMO max 500Vdc 200A))
		Voltage stabilized accuracy	< ±0.5%
		Current stabilized accuracy	≤ ±1% (output power in 20% ~ 100%)
		Efficiency (Max.)	≥ 96%
DC to AC mode	**DC input**	DC input voltage and Output power	From 300 to 1000Vdc, output power is 180kW power is linear derating to 88 kW (CHAdeMO max 500Vdc)
		Max Input current	440A@400Vdc, (587Amax@300Vdc)
	AC output	Output AC Voltage and Output power	From 320 to 530Vac, ouput power is 180kW; from 320 to 260Vac , output power is linear derating to 88kW
		Rated power and current	180kW / 265Aac
		Output AC Frequency	50 Hz/60 Hz
		THD	< 5%
		Output Power Factor	User Setting scale, 0.8 ~ 1, -0.8 ~ -1
		Efficiency (max)	≥ 96%
		OFF GRID Voltage accuracy and distortion	1% and <3% // Off Grid only supports 400Vac
		OFF GRID Power factor	> 0.7
		OFF GRID Dynamic voltage stability and recovery time	5% and 20mS
		OFF GRID AC voltage and current	380Vac (cannot be adjusted), 3L+N+PE, 264A

Protection and safety	Surge protection, Short circuit output, Overcurrent, Overvoltage, Low-voltage, Earth monitor, Insulation monitor, Overtemperature
Cable types and lengths	CCS Combo 2 and CHAdeMO, 4,5 mt
Operator's interface	TFT LCD colour 7 ", touch screen
Authentication and payment	RFID-NFC reader ISO IEC 14443-A and NFC - MIFARE Ultralight®, NTAG203, MIFARE Mini, MIFARE Classic® 1K, MIFARE Classic® 4K, FM11RF08 - (Optional) Anonymous credit card payment terminal
Network connection	Ethernet, 2G, 3G, 4G, EDGE, GPRS, GSM, LTE, UMTS (Optional) Wi-Fi and GPS
Remote access protocol	OCPP 1.6 Json
Operating temperature	-25°C to +50°C, derating when Tamb>45°C (optional: -35°C to 50°C)
Storage temperature	-35°C to +70°C
Rel. humidity	5% to 95% (non-condensing)
Protection degree	IP54 /IK10 (IK8 display)
Enclosure / Environment	Galvanised steel (anti-corrosion treatment and powder coating), for indoor and outdoor
Standards	IEC 15118, DIN70121, IEC 15118.20 (1st quarter 2023), CHAdeMO1.0
Safety & EMC	IEC 61851-1, IEC 61851-23, IEC 61851-21-2 class A (optional class B), IEC 62196-3, 2014/35/UE (CE) IEC 61439-2
Dimensions LxDxH / max weight	mm 810 x 768 x 1850 / 650 Kg
LED	2+1 vertical led strips for charging status and lighting
Options	Custom colour combination, decorations and logos / CHAdeMO certification