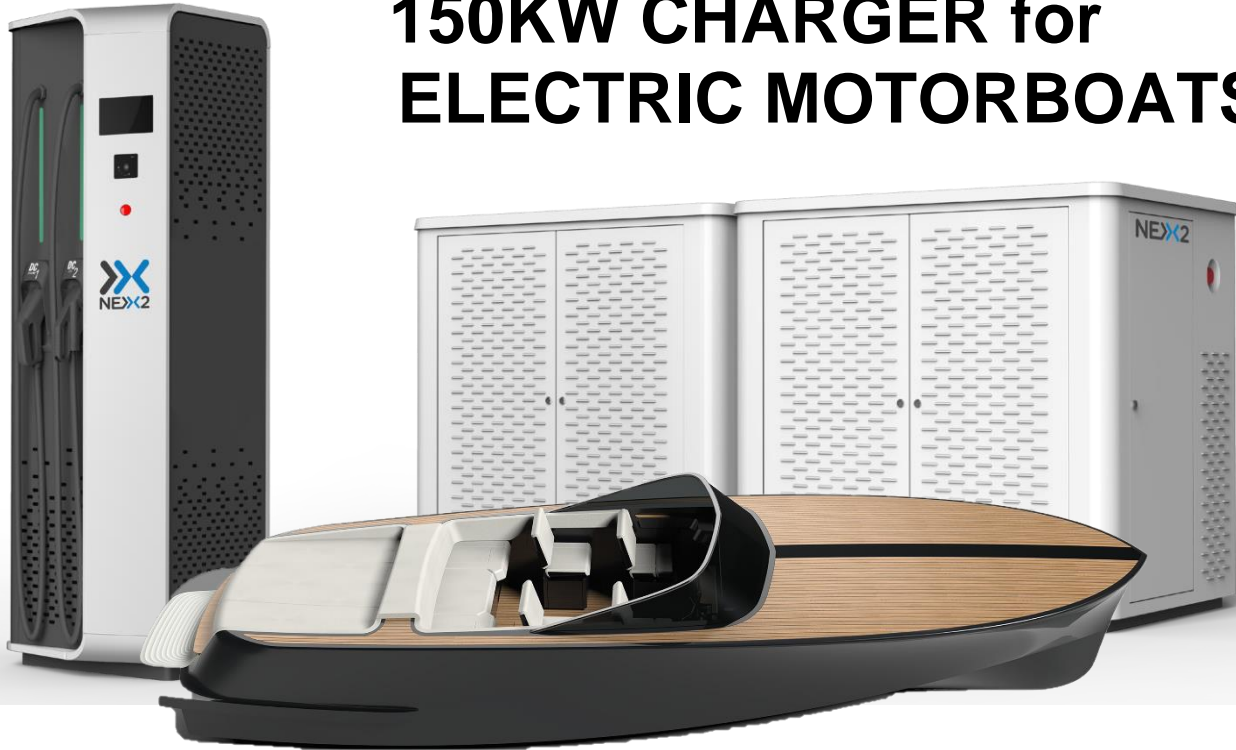


SEED HP MARINE

150KW CHARGER for ELECTRIC MOTORBOATS



- 150 KW power cabinet delivering up to 400A continuously and one or more separated charge posts with 2 DC connectors
- **Special made for salty marine environment (IP65 + air conditioners)**
- 2x350A CCS2 dry cable, optional 125A or 200A CHAdeMO cable
- 150-1000V voltage range
- A second power cabinets can be added to obtain 800A on a single charge post
- Dynamic power sharing allowing a second charge post to dynamically share power from 2 power cabinets
- RFID and OCPP integration
- Low maintenance, low energy consumption
- Compact and stylish italian design
- Customizable for branding

SEED HP MARINE is a high power, highly flexible, multi- standard 1000Vdc DC charging system. The system is composed of a single 150KW 400A power cabinet and a charge post for simultaneous charging of two EV DC vehicles with up to 350A on each DC connector. Both of them are special built for the salty marine environment: the power and control electronics are enclosed in IP66 protection grade enclosures and equipped with air conditioners.

A second power cabinet can be added to allow up to 800A and 300KW on a single charge post.

With the “Dynamic Power Sharing” feature the electric power is dynamically distributed between charge posts. In addition, the station adjusts the total output power in function of grid condition (Grid Load Management).

SEED HP MARINE supports present 500 Vdc and next generation 920 Vdc voltage range, adjusting max current in function of the voltage.

SEED HP has been designed keeping in mind the needs of the user and the operator: safety, ease of use and speed in charging operations; low install cost, reliability, low maintenance, low consumption, scalability, quick assistance and support.

RFID reader, payment terminal, 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.

SEED HP can be equipped for special applications like electric buses or truck, electric boats (corrosive marine environment), also with wireless CCS communication.

SEED HP charge post can also be customized with logos and special stylish colour combinations: i.e. glossy black and aluminium, champagne and dark gray or orange and aluminum.

Specifications

Plug	DC CCS IEC 62196-3	(Option) DC CHAdeMO JEVS G105
Charge Post		
Output voltage	150 – 1000V	150 – 500V
Output current, max	400A @ 350V - 150A @ 1000V	200A (500V)
Operator's interface	TFT LCD color 7 " , touch screen	
Remote access protocol	OCPP 1.6	
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 connections	10/100 Base-T Ethernet, GSM CDMA 3G modem	
LED	2 led vertical LED strips for charging status +1 vertical LED strip for lighting	
Cooling unit	400W cooling capacity, 230V 50/60 Hz	
Dimensions LxDxH / weight	mm 607 x 570 x 1850 / 250 Kg approx	
Power cabinet		
Output power	150W 400A continuous	
Input AC	400 VAC +/- 10% / 3phase + PE / 45-65 Hz	
Efficiency	93,5% at full load	
Power factor	>0,99 @ 400Vac & Rated Power (THD<5%)	
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	
Cooling unit	2900W cooling capacity, 400V 50/60 Hz	
Dimensions LxDxH / weight	mm 1500 x 1200 x 1500 / 1300 Kg approx	
Other features		
Temperature	Operating -20°C to +50°C (derating Ta>40°C) /Storage: -35°C to +60°C	
Rel. humidity	5% to 95% (non-condensing)	
Enclosure	Galvanised steel, anti-corrosion treatment and powder coating for marine salty environment	
Protection and safety	Plugs electric separation, Short circuit output, Overcurrent, Reverse current, Overvoltage, Low-voltage, Earth monitor, Isolation monitor, Overtemperature (output power derating at > 50°C internal)	
Options	Matt polycarbonate cover for rain and sun protection / customcolour combination and logos / CHAdeMOcertification	

