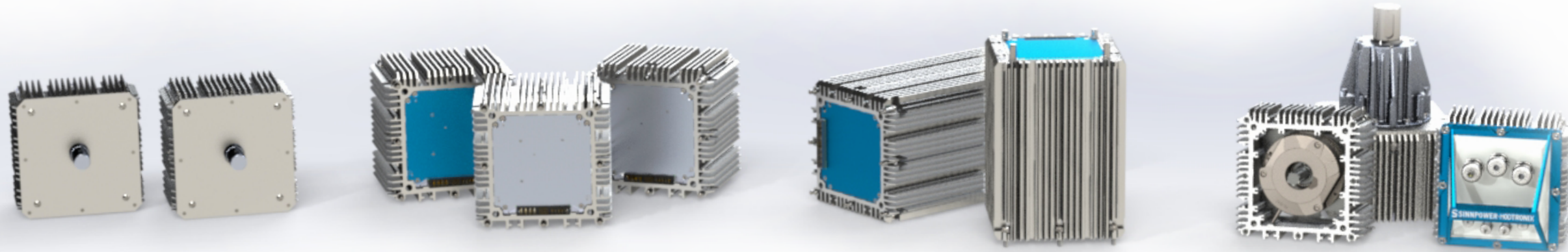




## MARITIME ENGINEERING OCEAN ENERGY SOLUTIONS



## MODULAR ELECTRONICS MODTRONIX 4.0

# ABOUT

## SINN POWER GMBH

CONTACT@SINNPOWER.COM

### SINN POWER GMBH

Founded in 2014

### EMPLOYEES

15 FTEs & 20 academics

### LOCATIONS

Gauting, Germany (Headquarters),  
Iraklio, Greece (R&D Facility)

### DEVELOPMENT FOCUS

Maritime Engineering (Floating Structures)  
Modular Power Electronics (IP68 Rating)

### CONTACT

Philipp SINN (CEO & Founder)  
contact@sinnpower.com  
+49 (0) 89 209 6197 5

[www.sinnpower.com](http://www.sinnpower.com)

Germeringerstr. 9  
D-82131, Gauting  
GERMANY





# WAVE ENERGY CONVERTER

CONTACT@SINNPOWER.COM

## STRUCTURE WEC

Wave Energy Converters for fixed structures

## AREAS OF APPLICATION

Ports (Breakwater Walls)  
Oil & Gas (Offshore-Platforms)

## TECHNICAL DATA

Installed Power:	20 kWp - 40 kWp
Length of lifting rod:	10 m
Floating Body Diameter:	2.5 - 3.5 m

## ELECTRIC OUTPUT

Output Voltage:	400VAC / 800VDC
-----------------	-----------------

## POWER ELECTRONICS

### SINN Power ModTroniX

MTX E-Machines, MTX MotorDrives  
MTX DCDC Converters, MTX DC AC Inverters



# OCEAN HYBRID PLATFORM

CONTACT@SINNPOWER.COM

## FLOATING OHP

Modular, multi-purpose platform for ocean based energy production and infrastructure development. All components shippable in ISO containers.

## AREAS OF APPLICATION

Renewable energy production (Wave, Wind, PV)  
Aquacultures  
Floating infrastructure

## TECHNICAL DATA

Smallest floating unit:	12m x 12m
Largest floating unit:	108m x 108m
Floating Body Diameter:	3.5m
Max. Wave Height:	6m - 10m

## RATED POWER

OHP Wave:	0.7 kWp / m <sup>2</sup>
OHP Wind:	0.15 kWp / m <sup>2</sup>
OHP PV:	0.15 kWp / m <sup>2</sup>
OHP Full Hybrid:	0.8 - 1.0 kWp / m <sup>2</sup>

## POWER ELECTRONICS

SINN Power ModTroniX



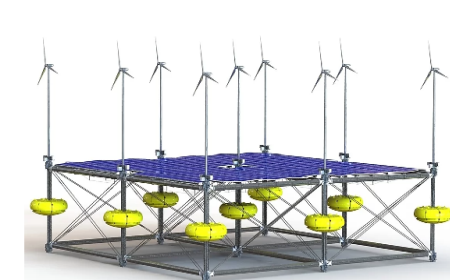
OHP Wave



OHP Wind



OHP PV



OHP Full Hybrid



# OHP HERAKLION

[CONTACT@SINNPOWER.COM](mailto:CONTACT@SINNPOWER.COM)

## PROJECT DESCRIPTION

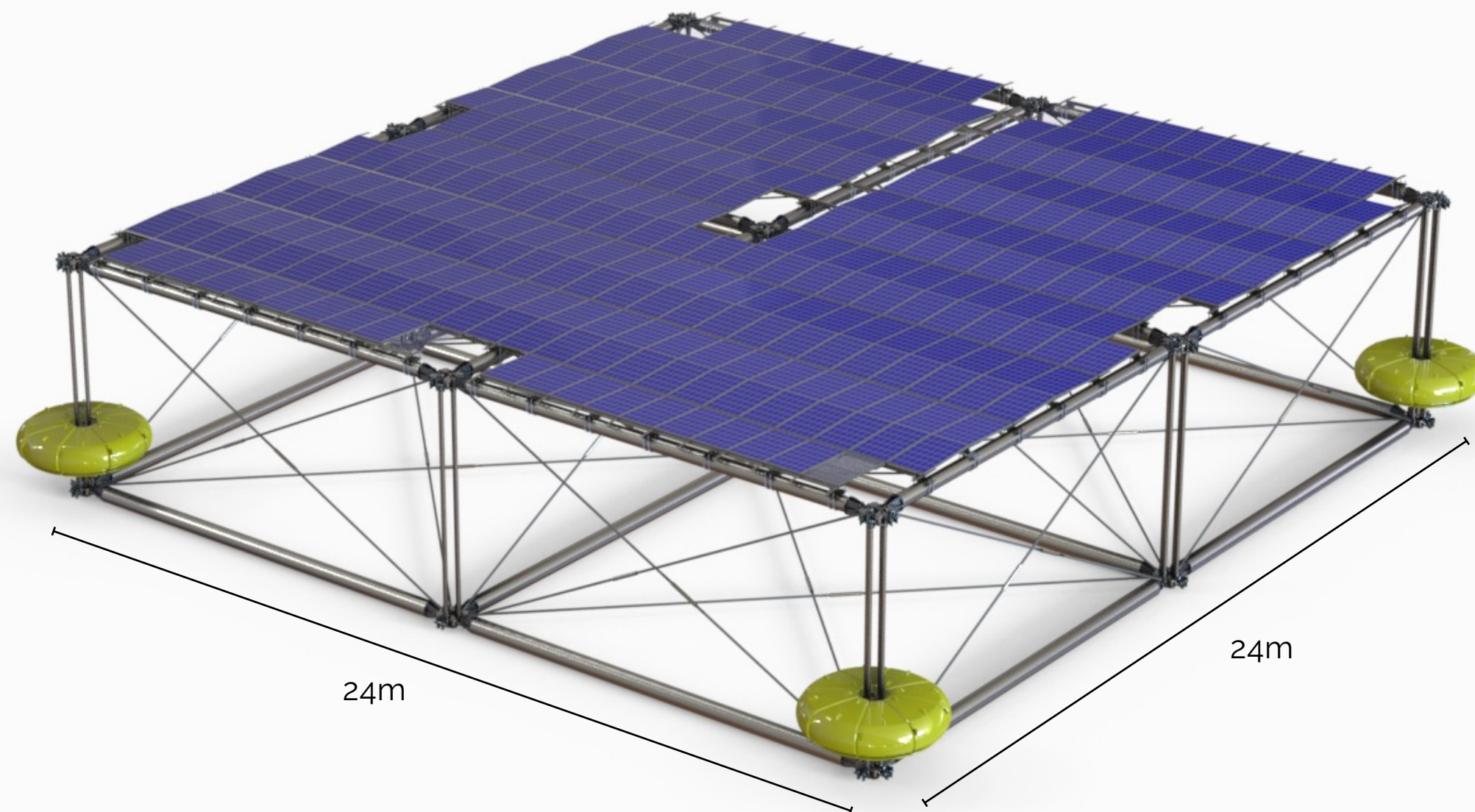
SINN Power OHP PV demonstration project at the R&D site in Heraklion (GRE) is currently being installed and begin of operations is planned in **Q3 2020**

## PROJECT LAYOUT

3x3 floating bodies = 576m<sup>2</sup>  
80kWp installed PV capacity  
800VDC land-line to 24kWh SINN Power Storage (MTX)  
400VAC grid connection (20kWp)

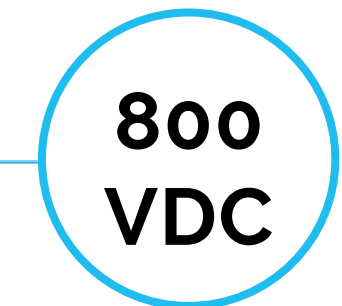
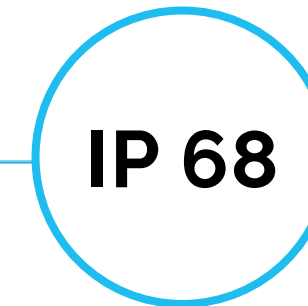
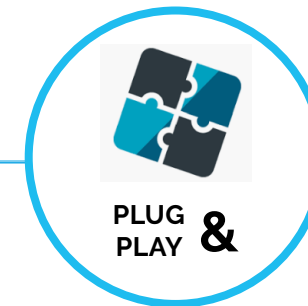
## PROJECT EXTENSION

March 2021: 50kWp Wind Turbines	(5 x 10kWp)
March 2022 160kWp Wave Energy	(4 x 40kWp)



# MTX MODULAR ELECTRONICS

CONTACT@SINNPOWER.COM



## ELECTRIC MACHINES

- 5kW - 20kW @ 1000rpm
- 5kW - 20kW @ 8000rpm

## POWER ELECTRONICS

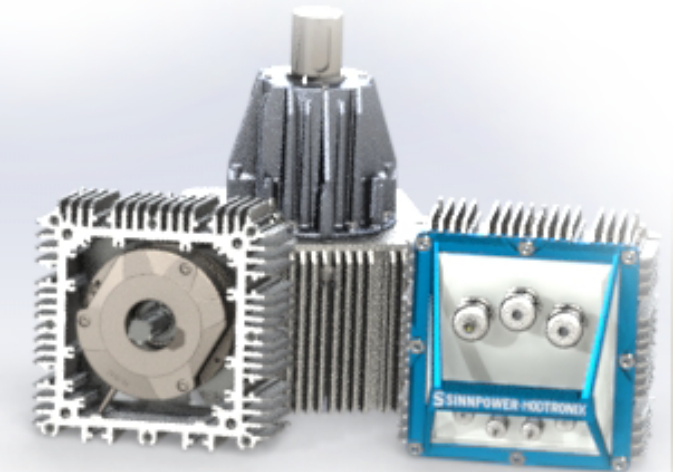
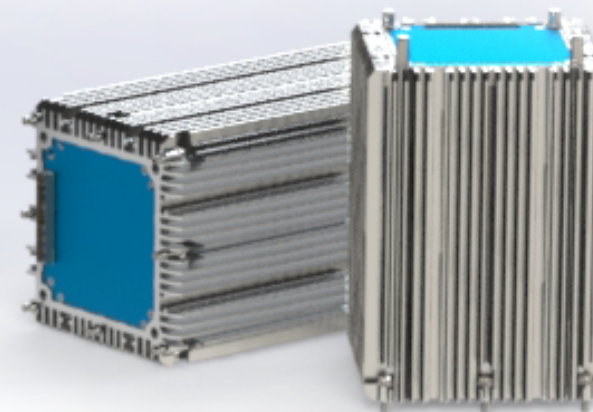
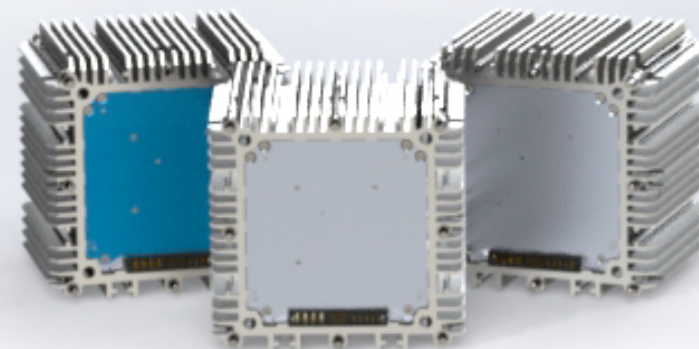
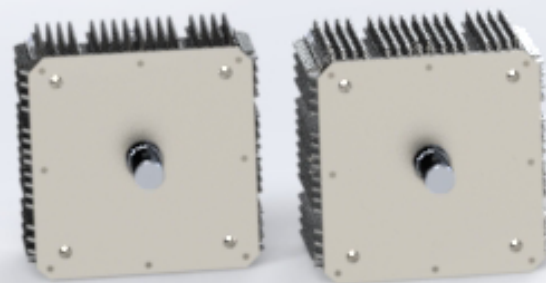
- 7.9kW - 20.7kW Inverters
- 20kW DC Converters
- 5kW - 20kW MotorDrives

## STORAGE

- 4.8 kWh - 24kWh LFP Storage
- XL SuperCap Buffer

## POWER UPS

- Power-Off Brakes
- Heavy Duty Shafts & Bearings
- Integrated PLC



### IP68

The IP68 rating guarantees:  
Protection from contact with harmful dust and protection from immersion in water with a depth of more than 1 meter.

### EFFICIENT

By using the latest components, SINN Power's MTX modules guarantee highest efficiencies at competitive prices.

### SMART

All modules are equipped with powerful micro-controllers which process and manage data across the entire system, enabling remote monitoring and maintenance via smartphone or web application.

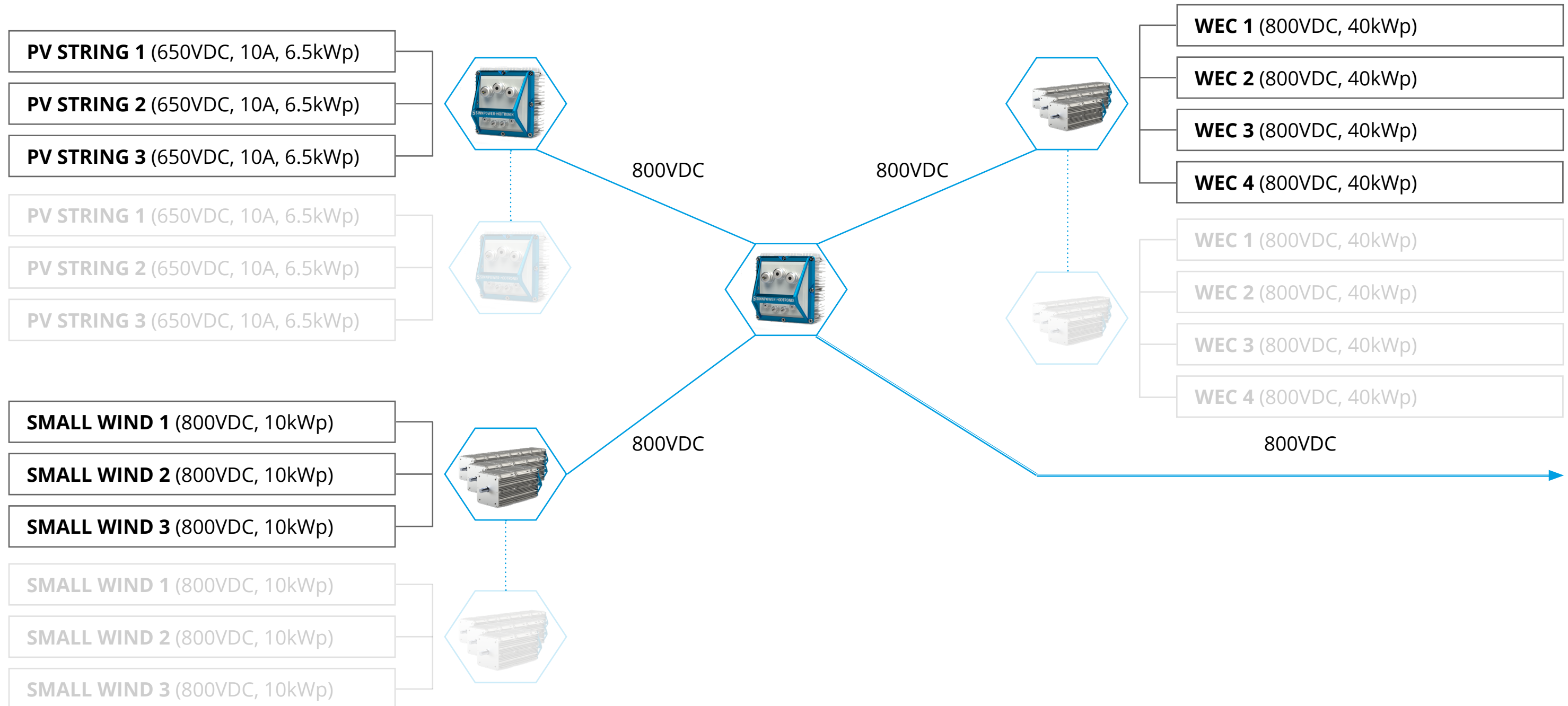
### MODULAR

SINN Power's patented housing not only accounts for the IP68 rating, but also great system flexibility. All modules can be either stacked or cabled, systems can be enlarged and single components can be hot-swapped.



# MTX SMART GRID - OHP

CONTACT@SINNPOWER.COM





Dr.- Ing. Philipp Sinn (CEO & Founder)

contact@sinnpower.com  
+49 (0) 89 209 6197 5  
[www.sinnpower.com](http://www.sinnpower.com)

---

SINN Power GmbH

Germeringerstr. 9  
D-82131, Gauting  
GERMANY

---