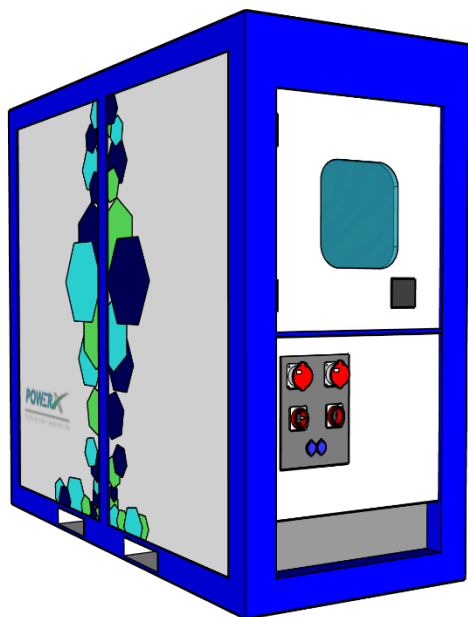


Energy Storage with Sodium Nickel Technology:  
**Serie MINI From 67 - 90 kWh**



**Application with GEN SET**

- EBS is an energy storage system able to work in combination with Gen set (hybridization) to reduce by far the fuel consumption.
- The Gen set are inefficient, and the specific fuel consumption is low at high load but very high at partial load. The use of the EBS off set the running at partial load or when the load is very low and allow the gen set to work only in efficient way

**Benefit**

- Reduce the fuel consumption up to 50%
- Reduce the noise by switch off the gen set in case of low load
- Reduce the maintenance costs by reducing running hours
- Reduce CO2 and NOX emission of gen set
- Reduce the size of gen set by working sync
- The green battery (Sodium Nickel) is not dangerous
- Range of operating temperature in standard conditions: -20°C to 40°C

**TECHNICAL SPECIFICATION**  
**67-90kWh**

Series	MINI			
	EBS 30-67	EBS 70-67	EBS 70-90	EBS 90-90
Energy (kWh)	67	67	90	90
COP (kW)	22	22	30	30
Power Peak (kW)	30	67	70	90
Nr of SoNick batteries	3	3	4	4
Suggested Gen set kVA	15-60	20-60	30-125	60-125
Output connections	1x CEE 125A	3x CEE 125A	2x CEE 125A	2x CEE 125A
Input connections	125A 3ph CEE from AC in Busbar			
Lifecycle Batteries	4500 Cycles at 80% DOD			
Operative temperature	-20°C - +40°C			
Dimensions (mm)	1200X2900X2100			
weight (Kg)	1500	1600	1850	1900

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### How the EBS can works

- **Peak shaving:** the EBS connected and synchronized with a gen set in base load (gen set is grid forming) in case of high peak the EBS provide the additional power.
- **Black Start:** the EBS is ready to provide energy in case there is a load and can switch on the gen set.
- **Grid Forming:** the EBS is creating the grid and the gen set is following.
- **Grid Following:** the gen set is forming the grid and the EBS is following.
- **The output power:** of the system is the sum of tot power Peak/ COP of the EBS and the total power of the gen set

### Charging batteries:

- **By Gen set:** that's providing the energy for charging the batteries
- **By PV panels:** we can connect PV panels to charge or help to charge the EBS
- **BY grid:** according to the local legislation the system could be charged by the grid

