



Datasheet

Energy Storage Systems

ESS 30 kWh / 15 kVA

ESS 40 kWh / 15 kVA

ESS 60 kWh / 30 kVA

ESS 80 kWh / 30 kVA

- Model Canopy

Version

1.04

Edition

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With the help of **Energy Storage Systems (ESS)**, MOSA Aggregaten BV offers gen-set users the opportunity **to reduce their Carbon footprint** by optimally load the connected gen-set as much as possible. *(in the area where there is an optimal energy/fuel consumption ratio)*
 Practical tests have shown that a **fuel saving of 30 to 60%** are no exceptions.

This gives you a three-fold return of investment in an energy storage system:

- 1) **Less CO2 emissions, increases your chances of tendering according to the CO2 performance ladder.**
- 2) **Up to 30 to 60% fuel savings.**
- 3) **lower maintenance costs and longer gen-set life.**

Also, any noise pollution is reduced by the reduced running hours of the gen-set.

Energy Storage Systems, built into a standard gen-set canopy, feature **"MOSA" / "ExtreMe Power"** hybrid (solar) on/off grid inverters with **"ExtreMe Power LiFePo4"** 10 kWh or 20 kWh batteries. The 20 kWh batteries feature built-in DC main switches and CAN bus for status notification on the inverter's display.

The expected life of these batteries is **8 to 12 years**, after which the batteries will still have 80% of their original capacity.



LiFePO4 prisma cells

Energy Storage Systems with PV-string input sockets could also feed the energy produced by the solarpanels directly to the consumers or charge the batteries.



*Hybrid (solar) on/off-grid inverter
5,5 kWh; 220-240V; 50/60 Hz*



ExtreME Power LiFePo4 battery

A return of investment
 < 3 years is possible

Specifications	ESS 30kWh/15kVA	ESS 40kWh/15kVA	ESS 60kWh/30kVA	ESS 80kWh/30kVA
Total energy storage capacity (Kwh)	30,6	40,8	61,4	82
Usable capacity in kWh	27	36	54	74
Output power @100% 1 phase 230V/50Hz	5 kVA	5 kVA	10,5 kVA	10,5 kVA
Output power @100% 3 fase 400V/50Hz	15 kVA	15 kVA	31,5 kVA	31,5 kVA
Frequency selection	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
ExtreMe Power LiFePo4 batt. 202 Ah/51,2V DC	3 pcs	4 pcs
ExtreMe Power LiFePo4 batt. 400 Ah/51,2V DC	3 pcs	4 pcs
Batteries with intelligente BMS	✓	✓	✓	✓
BMS status at inverter display			Option	Option
Battery status monitor (V,A,Ah en %)	✓	✓	✓	✓
Surge protection AC Type 1+2 (12,5kA/80kA)	2 pcs	2 pcs	2 pcs	2 pcs
Surge protection DC Type 1+2 (12,5kA/60kA)			2 pcs	2pcs
AC+ DC leakage current monitor + test button	✓	✓	✓	✓
<6mA DC leakage current statement	✓	✓	✓	✓
63A socket with 300 mA RCD, type A	✓	✓
< 63A sockets with 30 mA RCD, type A	✓	✓	✓	✓
Multi mode Hybrid on/off grid inverter	3 pcs	3 pcs	6 pcs	6 pcs
2 x PV-string input (1500 - 4500 Wp2	option	option	✓	✓
Active temperature PWM control	✓	✓	✓	✓
High pressure cooling fan (1200 pa / -10...+70° C)	2 pcs	2 pcs	4 pcs	4 pcs
Pre coarse + fine air filters (water cleanable)	✓	✓	✓	✓
Battery low / charge alarm (LED + Buzzer)	✓	✓	✓	✓
Grid- and/or gen-set watchdog (V,HZ,Ph sec.)	✓	✓	✓	✓
Temperature display on controlpanel	✓	✓	✓	✓
Environment temp.@100% load	-10 tot 40	-10 tot 40	-10 tot 40	-10 tot 40
ESS components are also available as assemble packages				
Dealer prices	Call us	Call us	Call us	Call us



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