

MBE

Mobile Battery Energy Storage systems

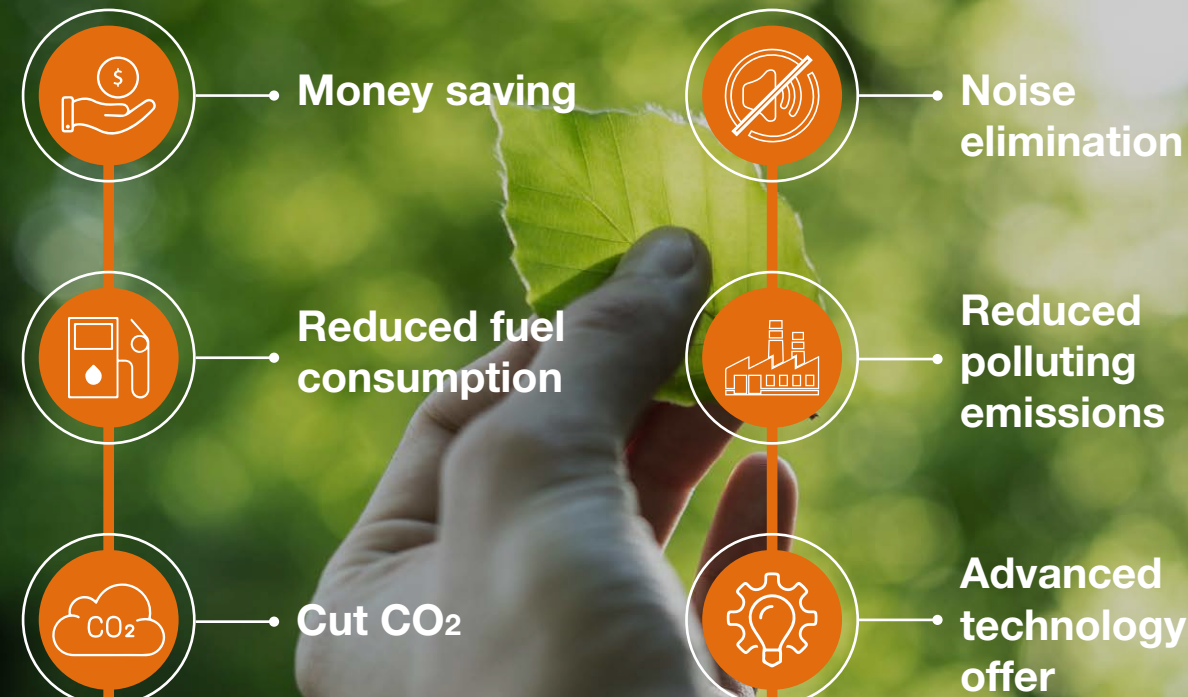
Today's energy grid is facing an unprecedented set of **challenges**: a need to **transition** away from fossil fuels towards renewable energy sources, spiking demand due to the **increased electrification** of electric vehicles, homes and consequently **infrastructure instability**.

With its broad suite of products, Generac Mobile can support this energy transition, offering a dedicated range of battery energy storage solutions to reduce fuel consumption and CO₂ emissions.

HOW IT WORKS

The MBE range is a battery energy storage system that allows the **storage of energy from multiple sources**: generator, solar or the grid. **Energy can be redistributed**, at a later time, to a site that needs power. When one of our battery energy storage systems is deployed onto the site it is possible **to have a clean, green solution** that can power the site during those periods of low energy demand, such as overnight or during the weekend. This allows customers to utilise **reliable, green, clean energy** in almost any application.

Key benefits



The **widest** choice of solutions for **mobile lighting, power and energy storages**

As international market leader, we offer the widest range of mobile products: power generators, light towers, battery energy storage systems and much more.

Our professional and innovative approach, guarantees products of unquestioned reliability and with high technical performances.

Distributed by

Generac Mobile Products Srl
 Via Stazione, 3 bis - 27030 Villanova d'Ardenghi (PV) - Italy
 Tel +39.0382.567011 - gmp.srl@generac.com
 www.generacmobile.com



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ENERGY STORAGE
 BATTERY STORAGE UNITS

SX PLUS Series

KEY FEATURES:

- Li-ion and AGM battery
- Automatic generator start/stop
- Low noise and emissions
- Plug and play
- Maintenance-free
- Stackable (up to 2 units)



| TECHNICAL DATA | SX PLUS 5/25 AGM | SX PLUS 10/25 Li |
|----------------------------------|------------------|------------------|
| Output power (Continuous) | 5 kVA | 10 kVA |
| Output power peak (5s) | 10 kW | 20 kW |
| Voltage | 230 V | 230 V |
| Frequency | 50 Hz | 50 Hz |
| Phases | 1 | 1 |
| Battery type | AGM | Li-Ion LMN |
| Battery nominal capacity | 25 kWh | 25 kWh |
| Usable energy AC side (@80% DoD) | 20 kWh | 20 kWh |
| Length x Width x Height (mm) | 1096x1066x1185 | 1096x1066x1185 |
| Weight max (kg) | 850 | 560 |
| Protection rating (IP) | 44 | 44 |
| Operating temperature range (°C) | -20/+45 | -10/+45 |

MX Series

KEY FEATURES:

- Deep cycle automotive NMC battery (Li-ion models)
- Advanced EMS with touch screen control
- GSM Remote monitoring
- Full system DC isolator with pre-charge
- Auto Full system bypass
- Single to three phase conversion
- Solar PV charge controller MPPT (optional)
- EV Charge point (optional)
- Custom input / output sockets



| TECHNICAL DATA | MX 10/40 Gel | MX 15/37 Li | MX 20/37 Li | MX 30/50 Li | MX 30/75 Li |
|----------------------------------|----------------------|----------------|----------------|----------------|----------------|
| Output power (Continuous) | 10 kVA | 15 kVA | 20 kVA | 30 kVA | 30 kVA |
| Output power peak (5s) | 15 kW | 30 kW | 40 kW | 60 kW | 60 kW |
| Voltage | 230 V | 400/230 V | 230 V | 400/230 V | 400/230 V |
| Frequency | 50-60 Hz | 50-60 Hz | 50-60 Hz | 50-60 Hz | 50-60 Hz |
| Phases | 1 | 3 | 1 | 3 | 3 |
| Battery type | Gel lead acid OPzV-S | Li-Ion NMC | Li-Ion NMC | Li-Ion NMC | Li-Ion NMC |
| Battery design life to 80% DoD | 2000 cycles | 3000 cycles | 3000 cycles | 3000 cycles | 3000 cycles |
| Battery nominal capacity | 40 kWh | 37.5 kWh | 37.5 kWh | 50 kWh | 75 kWh |
| Usable energy AC side (@80% DoD) | 32 kWh | 26.25 kWh | 26.25 kWh | 40 kWh | 60 kWh |
| System pass-through capacity | 100 A | 100 A | 100 A | 100 A | 100 A |
| Length x Width x Height (mm) | 1600x1020x1708 | 1600x1020x1708 | 1600x1020x1708 | 1600x1020x1708 | 1600x1020x1708 |
| Weight max (kg) | 1930 | 850 | 850 | 980 | 1150 |
| Protection rating (IP) | 34 | 34 | 34 | 34 | 34 |
| Operating temperature range (°C) | -20/+45 | -10/+45 | -10/+45 | -10/+45 | -10/+45 |

LX Series

KEY FEATURES:

- Deep cycle automotive NMC battery (Li-ion models)
- Advanced EMS with touch screen control
- GSM Remote monitoring
- Full system DC isolator with pre-charge
- Auto Full system bypass
- Single to three phase conversion
- Solar PV charge controller MPPT (optional)
- EV Charge point (optional)
- Custom input / output socket



| TECHNICAL DATA | LX 20/60 Gel | LX 30/60 Gel | LX 45/75 Li | LX 45/90 Gel | LX 45/125 Li | LX 60/125 Li |
|----------------------------------|----------------------|----------------------|----------------|----------------------|----------------|----------------|
| Output power (Continuous) | 20 kVA | 30 kVA | 45 kVA | 45 kVA | 45 kVA | 60 kVA |
| Output power peak (5s) | 40 kW | 60 kW | 90 kW | 90 kW | 90 kW | 120 kW |
| Voltage | 230 V | 400/230 V | 400/230 V | 400/230 V | 400/230 V | 400/230 V |
| Frequency | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| Phases | 1 | 3 | 3 | 3 | 3 | 3 |
| Battery type | Gel lead acid OPzV-S | Gel lead acid OPzV-S | Li-Ion NMC | Gel lead acid OPzV-S | Li-Ion NMC | Li-Ion NMC |
| Battery design life to 80% DoD | 2000 cycles | 2000 cycles | 3000 cycles | 2000 cycles | 3000 cycles | 3000 cycles |
| Battery nominal capacity | 60 kWh | 60 kWh | 75 kWh | 90 kWh | 125 kWh | 125 kWh |
| Usable energy AC side (@80% DoD) | 48 kWh | 48 kWh | 60 kWh | 72 kWh | 100 kWh | 100 kWh |
| System pass-through capacity | 100 A | 100 A | 100 A | 100 A | 100 A | 200 A |
| Length x Width x Height (mm) | 2012x1183x2012 | 2012x1183x2012 | 2012x1183x2012 | 2012x1183x2012 | 2012x1183x2012 | 2012x1183x2012 |
| Weight max (kg) | 2994 | 3039 | 1630 | 3995 | 1970 | 2024 |
| Protection rating (IP) | 34 | 34 | 34 | 34 | 34 | 34 |
| Operating temperature range (°C) | -20/+45 | -20/+45 | -10/+45 | -20/+45 | -10/+45 | -10/+45 |

Battery technology

- MBE models are available with lead acid and lithium ion batteries:
- lead acid is a proven technology that is tried, tested and cost less.
 - lithium ion is a modern and premium technology.

| | LEAD ACID BATTERIES | LITHIUM ION BATTERIES |
|------------------------------------|--|--|
| COST | Cost effective solution. Immediately available in large quantities | With higher initial costs at first glance appear to be less cost effective but due to a greater lifecycle, their lifetime value could equalise, if batteries are appropriately cared |
| CAPACITY & WEIGHT | Energy density of 50+Wh/l | Energy density of 125+Wh/l. These batteries can pack more energy into a smaller place. This units weighing in at half of their equivalent lead acid unit |
| LIFESPAN* | Expectation to last for 2000-3000 cycles | Expectation to last for over 3000 cycles, as used as directed |
| CHARGING TIME ** | Generally have a lower rate of charge | Generally able to accept a higher rate of charge |
| HOT & COLD ENVIRONMENTS | Accept a charge at low temperature | Perform better at higher temperatures and cannot be charged below freezing point |

*A lifespan of a battery in "cycles" if you discharge a battery and then recharge it then this is one cycle
 **Charging time may change depending on the size of the batteries and on the amount of energy used to charge

The series of the MBE range can be used into two configurations:

Stand alone solution

Ideal way to meet needs of zero noise environments like night operations, remote telecom applications, or to resolve low load challenges

Hybrid solution

This technology is compatible with any diesel genset. In any demanding application like events and construction sites, where low loads or peaks can be a problem for the generator, the hybrid solution is ideal to improve the overall performances of the site



How it works 24h on site with a generator

Hybrid power systems manage the operation of diesel generators: when power demand is low the generator turns off, when the battery runs low or power demand increases the generator turns on. The result is less running hours, more efficient consumption of fuel, less emissions, less maintenance.

