

Commercial Solar Batteries

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Solar battery storage for commercial use

Commercial battery storage systems store surplus energy generated by solar panels so this energy can be used when your business needs it.

Solar panels are only the first step in your move towards green energy and reducing your energy costs. Storing renewable energy is the vital next step towards decarbonisation, lowering your reliance on on-grid energy and minimising potential business downtime from grid blackouts.

With gas and electricity prices due to rise again, selling the surplus energy you generate back to the grid is no longer an effective way to offset the cost of your energy. With solar batteries, you will store surplus energy to reduce the on-grid energy you use and reduce your carbon footprint.



Protect against rising energy costs by storing excess solar energy generated by your solar panels, reducing your use of energy from the national grid.



Decarbonise your business Make the move from brown to green energy sources to reduce your business's carbon footprint and promote your corporate social responsibility.



Discharge the energy from your batteries at peak times of the day to avoid paying peak prices for power from the grid.



In the event of a grid blackout or energy rationing, you can draw your energy from your solar batteries to remain fully operational.



Pairing a powerful solar battery system with your solar PV panels can allow you to operate fully independent from the grid and rely entirely on your own energy production.



Shift your energy usage so you consume more energy during the day while your solar panels are charging.

DC-coupled batteries that pay for themselves

LamasaTech provide top-tier solar storage systems that create an economical DC-coupled solution. We believe in creating a solar set-up that provides ROI, can be scaled as your business grows, reduces your carbon footprint and ultimately protects your business against energy price surges.

We pair our batteries with hybrid inverters to create a DC-coupled system. DC-coupled systems require less conversions of the energy generated from your solar panels, which is more energy efficient and results in more energy to power your business.

Our batteries are compatible with a wide range of hybrid inverters from the following brands.



We can source the appropriate inverter on your behalf or provide a recommendation for you to source. All inverters have management software to monitor your system and manage import/export.

Industrial battery model

The best solar battery storage for commercial and industrial operations, scalable to all sizes of business.

- ✓ Indoor use only
- \checkmark 2.5 kWh and 5 kWh modules available
- ✓ Scale to 500,000 kWh stackable in series or parallel
- ✓ Small, lightweight design allows for easy installation and maintenance
- \checkmark Modular system that can be expanded at any time
- Small footprint batteries can be stacked easily without racks, to fit more batteries in less space
- ✓ Reliable LFP cells with a life cycle of >6000 cycles
- ✓ 90% depth of discharge
- \checkmark Quiet fanless design with natural cooling system
- ✓ Average lifespan of 15+ years



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Specifications

| Model | LFP 5000 | LFP 2500 |
|---|------------------------------|------------------------------|
| Total Energy* | 5 kWh | 2.5 kWh |
| Usable Energy (DC)* | 4.6 kWH | 2.2 kWh |
| Nominal Discharge Power | 3.0 kWh | 1.5 kWh |
| Peak Power (Only Discharge) | 6 kWh for 3 seconds | 6 kWh for 3 seconds |
| Constant Current (Only Discharge) | 80A | 40A |
| Voltage | 48~56Vd.c | 48~56Vd.c |
| Nominal Voltage | 51.2Vd.c | 51.2Vd.c |
| Nominal Current | 60A | 30A |
| Max. Charge Voltage | 57.6Vd.c | 57.6Vd.c |
| Weight | 45kg | 23kg |
| Dimension (mm) | 500 x 448 x 135mm | 500 x 442 x 88mm |
| Safety | Cell UL 1973, CE | Cell TUV, CE |
| Max Connection Number | 8S/4P | 8S/8P |
| Maximum Recommended Depth of Discharge | 90% | 90% |
| Operation Condition | Indoor | Indoor |
| Operating Temperature - Charge | 0~45 °C | 0~45 °C |
| Operating Temperature - Discharge | 10~55 °C | 10~55 °C |
| WIFI Frequency Range | 2400MHz~2483MHz | 2400MHz~2483MHz |
| Humidity | <60% (No condensed water) | <60% (No condensed water) |
| Pollution Degree | 3 | 3 |
| Over Voltage Category | II | II |
| Cooling Type | Natural cooling | Natural cooling |
| Case Material | Metal | Metal |
| Colour | Black or White | Black or White |
| | | |

| IP Rating | IP 20 | IP 20 |
|-----------------------------------|--|--|
| Installation | Ground installation | Ground installation |
| Protective Class | 1 | 1 |
| Warranty | 10 years | 10 years |
| Life Span | > 15 years | > 15 years |
| Communication | CAN/ RS585 | CAN/ RS485 |
| Protection Mode | Dual hardware protection | Dual hardware protection |
| Battery Protection | Over-current Over-voltage Short circuit Under-voltage Over temperature | Over-current Over-voltage Short circuit Under-voltage Over temperature |
| Hazardous Material Classification | 9 | 9 |
| Transportation | UN 38.3 | UN 38.3 |

*Testing conditions based on temperature of 25°C at the beginning of life. Total Energy/Usable Energy measured under specific manufacturer testing conditions. Results may vary marginally in other conditions.

Battery pack model

The best solar battery for outdoor applications and for small to medium sized businesses.

- ✓ Indoor and outdoor use
- ✓ Wall mounted design
- ✓ 5 kWh and 10 kWh models available
- \checkmark Scalable to 160 kWh with up to 16 batteries in parallel
- \checkmark Reliable LFP cells with a cycle life of >6000 cycles
- ✓ 90% depth of discharge
- ✓ IP65 rate triple hardware protection
- \checkmark Quiet fanless design with natural cooling system
- ✓ Average lifespan of 15+ years



Specifications - Battery pack model

| Model | LT 5 kWh/LV | LT 10 kWh/LV |
|---|--------------------------------|--------------------------------|
| Total Energy* | 5 kWh | 10 kWh |
| Usable Energy (DC)* | 4.6 kWH | 9.2 kWh |
| Nominal Discharge Power | 3.0 kWh | 4.6 kWh |
| Peak Power (Only Discharge) | 7 kWH for 3 seconds | 10 kWh for 2 seconds |
| Constant Current (Only Discharge) | 100A | 100A |
| Voltage | 48~56Vd.c | 48~56Vd.c |
| Nominal Voltage | 51.2Vd.c | 51.2Vd.c |
| Nominal Current | 60A | 100A |
| Max. Charge Voltage | 59.2V±0.5V d.c | 59.2V±0.5V d.c |
| Weight | 54kg | 85kg |
| Dimension (mm) | 490 x 650 x 188 mm | 600 x 850 x 188 mm |
| Safety | CE | CE |
| Maximum Number of Parallel or Series | 16 | 16 |
| Maximum Recommended Depth of Discharge | 90% | 90% |
| Operation Condition | Indoor or Outdoor | Indoor or Outdoor |
| Operating Temperature - Charge | 0~45 °C | 0~45 °C |
| Operating Temperature - Discharge | -10~50 °C | -10~50 °C |
| Humidity | 4~100% (No condensed water) | 4~100% (No condensed water) |
| Pollution Degree | 3 | 3 |
| Over Voltage Category | II | II |
| Cooling Type | Natural cooling | Natural cooling |
| Case Material | Metal and plastic | Metal and plastic |
| Installation | Wall mount | Wall mount |

| IP Rating | IP 65 | IP 65 |
|-----------------------------------|--|--|
| Protective Class | Ι | I |
| Warranty | 10 years | 10 years |
| Life Span | > 15 years | > 15 years |
| Communication | CAN | CAN |
| Protection Mode | Triple hardware protection | Triple hardware protection |
| Battery Protection | Over-current Over-voltage Short circuit Under-voltage | Over-current Over-voltage Short circuit Under-voltage |
| Hazardous Material Classification | 9 | 9 |
| Transportation | UN 38.3 | UN 38.3 |

*Testing conditions based on temperature of 25°C at the beginning of life. Total Energy/Usable Energy measured under specific manufacturer testing conditions. Results may vary marginally in other conditions.

Book a free consultation

The capacity and style of battery you need depends on a number of factors including your current energy usage, daily yield from solar panels, maximum load and your average monthly and annual yield and location for your battery storage.

Book a call with our team and we'll provide a free consultation with recommendations on the best set-up for your requirements.

Request a callback on our website and we'll be in touch.

More technology solutions from LamasaTech...

LCD video walls



Visitor and employee sign-in system



Digital signage platform



For more information on our solutions, please visit <u>lamasatech.com</u>



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