

The power of smartness.

Solution Mega – Battery Energy Storage Systems (BESS) based on lithium-ion battery technology.



Plug-and-play system with factory pre-set parameters.



Creating the future - the Exide Technologies way:



Innovation



Reliability



Sustainability



High Performance

exidegroup.com

SOLUTION
MEGA

E / **ENERGIZING**
A NEW
WORLD

The world is changing. That's why we are energizing a new world.

For Exide Technologies, now is the time to release new energies to move even further into the future. Our new claim "Energizing a new world" is designed to convey this aspiration. We want to bring change to life, face challenges together with our partners, and develop solutions for today and tomorrow. **Let's create the future – the Exide way:**



Innovation is the engine of technology leadership. That's why we are constantly evolving, remain self-critical, and continue to inspire our customers. We believe that great questions deserve great answers, which is what our innovative R&D is responsible for.



Sustainability is an important part of our responsibility. That's why we rely on renewable energy and intelligent recycling concepts.



High performance is the standard we set for our products and services. We want all our solutions to be best in class. This gives our customers the certainty of being optimally equipped for any task.



Reliability defines our business. This applies to our products as well as our innovative development work, services, and partnerships. We have a responsibility that doesn't stop with our products, but rather starts there.



Tailormade for these applications:



Commercial and industrial applications



Agriculture



E-Mobility



Renewable energy and biogas plants



Utilities

Charged with energy. Full of knowledge.

All our experience, knowledge, and expertise are packed into this solution to meet the challenges of today's energy needs. We're taking on the big picture. Energy storage systems are the key factor for the energy transition. Solition Mega combines sustainable energy storage, independence from conventional energy sources and continuity of high power supply with significant monetary benefits.

Get the most out of Solition Mega:

1

Modular system available in different sizes for maximum flexibility.

2

Proprietary battery storage management software for maximum control and safety.

3

Designed and assembled in Europe, with energy consultants and services close to you.



Solition Mega energy storage systems offer a multitude of benefits when installed in-front-of- or behind-the-meter applications.



Frequency stabilization: Provide storage capacity to stabilize grid frequency for financial benefit to ensure grid availability and quality.



Off-grid application: Supply your rural area or island with electrical energy without any public grid connection.



Self-consumption: Store surplus renewable energy to lower bills and carbon footprint by using it later for your own consumption.



Energy trading: Profit from short-term imbalances in supply and demand, taking advantage of high price differentials by buying energy at low prices and selling it at high prices.



Micro-grid application: Optimize power sources, storage, and consumers to cut costs and reduce CO₂ footprint efficiently.



Back-up power: Ensure that your operation runs 24/7, even during blackouts or public grid failures.



Utility

In-front-of-the-meter

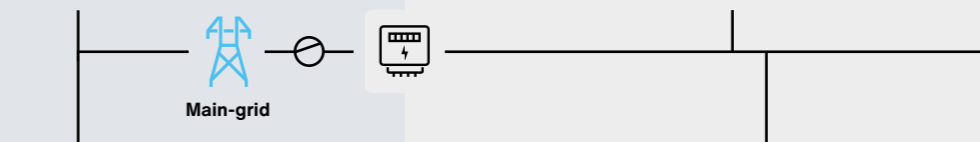
Behind-the-meter



ESS



Renewable energy



ESS



Renewable energy



Commercial and industrial sites



Peak shaving: Reduce power peaks during operation and avoid high grid fees and expensive grid expansion.

Engage your mind before engaging power.

Trend watch.

Sustainability.

Undisputed, the overall megatrend. The energy sector is pivotal, given its significant impact on greenhouse gas emissions. The transition to sustainable energy is not just an environmental imperative but also an economic and social one, as it promises to deliver long-term viability, resource efficiency, and energy security. In its wake, new trends within the energy market have appeared and are shaping the way we generate, regulate, use – and, last but not least, store energy in the future.



Energy market trends

1

Renewable energy integration is a transformative trend in the energy sector. But the shift brings challenges like volatility in energy production due to the unpredictable nature of sources, like wind and solar. To manage this, Frequency Containment Reserve (FCR) is crucial, ensuring grid stability by balancing supply and demand in real-time. These issues highlight the need for advanced grid management and storage solutions to fully harness the potential of renewable energy.

2

Energy efficiency is the key factor for the sustainable approach in the energy sector. By addressing peak power imbalance, it reduces the need for high-emission peak power plants. Through energy trading and day-ahead-markets, stakeholders can align with sustainability goals, trading energy based on anticipated demand and supply.

**The technology is there.
Just as we are there for you.**

Costs are decreasing, and progress can be accelerated by consulting industry specialists. This can effectively curb CO₂ emissions and ensure that your energy management projects are a success. Exide Technologies' Customized Energy Systems BV has successfully implemented over 200 battery energy storage (BESS) projects, beginning as early as 2014 in Europe.

Service made in Europe.

We at Exide Technologies attach great importance to good cooperation. And that means being there when our clients need us. Expertise does not end with the purchase. We are close by with service and support – the partner at your side to energize a new world.



3

Distributed energy resources (DERs) represent a forwardthinking trend towards more flexible and resilient energy systems. These resources enable the provision of electrical services through innovative models, like energy-as-a-service (eaas). In a virtual power plant (VPP) network, DERs are aggregated to enhance power generation and distribution efficiency, offering a sustainable and decentralized alternative.

For example, **neighborhood batteries** have a common storage capacity that can be shared among multiple users. This means a delicate balance of supply and demand within a local area by aggregating storage within the neighborhood. But there are many more advantages: Tenants can also use PV installations, grid operators can better control the flow of electricity and the price per kWh compared to private PVs is much lower.

4

The concept of "smart cities" is becoming increasingly popular, committing to sustainability and investing in smart new concepts for connectivity, energy and mobility transition. It is pioneering long-term economic, social and environmental solutions. That's where Exide Technologies comes on-board. The integration of battery storage technologies into urban energy systems has the potential to revolutionize the way cities manage and utilize electricity.

Battery Energy Storage Systems facing the above trends.

Exide Technologies is forcing the sustainable shift with its BESS, adeptly serving both in-front-of-the-meter and behind-the-meter applications. BESS units are crucial for integrating renewable energy sources, effectively storing excess power and ensuring its availability during peak demand. They stabilize the energy supply, but also facilitate essential grid management services, marking Exide Technologies' pivotal role in **energizing a new world.**

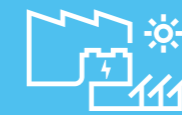
You have a plan.

We have the energy.

Solition Mega is the solution for today's and future demands. With our modular approach, our experts will assist in configuring the appropriately sized storage system for your application, ensuring a reliable and efficient solution.



Energy trading



Self-consumption



Grid support



Designed and
assembled in Europe



Sales and service all
over Europe and MEA



R&D facility
in Europe

Flexibility in new dimensions.

And in various sizes.

No matter the energy need, our flexible Solition Mega energy storage system provide a reliable and efficient solution for a wide range of energy storage needs including micro-grid application, frequency regulation, peak shaving, back-up power, energy trading and self-consumption optimization. The system's compact and flexible design allows it to be placed at various locations, should local conditions change. Explore our cost-effective, environmentally-friendly and high-power solutions and profit from cost savings and optimized energy use. All of these systems are also available as indoor solutions. Custom system sizes can also be made at the customer's request for an additional charge.



Solition Mega Zerofive

- High power and capacity in a small footprint
- Compliant with all current safety standards
- Integrated aerosol fire extinguisher
- Modular design from 62.5 to 500 kW and from 138 to 552 kWh

Solition Mega One

- Field proven with many installations and applications
- Integrated aerosol fire extinguisher
- Fully integrated with a first-class control system
- Modular design from 62.5 to 1000 kW and from 138 to 1104 kWh



Solition Mega Three

- Extended functional life due to liquid cooling
- Up to 3440 kWh storage capacity in a small footprint
- Modular converter, from 215 to 1720 kW
- Fast installation and commissioning
- Excellent price per kWh

Key features

- **High-capacity storage:** The system offer wide flexibility in storage capacity via their modular LiFePO₄ batteries, assuring long-lasting and reliable performance. In other words, it's a declaration of independence regarding availability and high prices.
- **Strong power supply:** With modular converters that can be equipped with up to eight modules to fine-tune the power to your application, these system guarantees stable and high efficiency energy delivery for various applications.
- **Multi-functional:** Whether it is for office, industrial or commercial applications, or as support for EV chargers, our versatile energy storage system delivers power with consistent and high efficiency. Therefore, it can be used for applications such as peak shaving, energy trading, grid boosting, etc.
- **Advanced control system:** Our system is complemented by an innovative control system that ensures precise control, secure operation, and superior power management.
- **Safety ensured:** We prioritize your safety. That is why our system contains an automatic aerosol fire extinguishing system, which guarantees extra protection during emergencies. And, of course, the system has been developed and built to meet the required certifications.
- **Air conditioning:** The integrated air conditioning ensures safe and optimal temperature maintenance, to guarantee battery life and performance.
- **Durable container:** The unit is constructed with a steel frame and insulated sheet steel walls which provide unparalleled durability and resistance to environmental factors, resulting in a long service life.

Benefit from our expertise:

- Worldwide data access
- Plug-and-play with pre-set parameters
- Over-the-air update of system software
- Flexible to be placed at various locations; moveable system
- Flexible modular configurations
- Open infrastructure towards third-party aggregators
- Design and assembly based in Europe

For further information please scan the QR code and check the data sheet!



Advanced software. Advanced thinking.

We design software that adheres to the highest reliability standards. The control system interconnects lithium-ion batteries, converters, accessories, and other equipment to perform optimally over a vast temperature range and an extended duration. The application software prioritizes processing speed and security, while preserving adaptability. Our autonomous software supports peak shaving applications, solar optimization and frequency reserve (FCR), while also allowing third-party control without endangering safety features. Moreover, it communicates with the cloud for logging and reporting, which enables remote servicing and over-the-air updates, if required.

Enhanced efficiency and safety:



By integrating all components (lithium-ion batteries, converters, accessories) into a single, fully integrated system, Exide ensures seamless collaboration. This streamlines operations, minimizes errors, and enhances overall efficiency. The use of an industrial fan-less computer system, solid-state disk, and wide-temperature components ensures reliable performance even in challenging environments.

Modularity and scalability:



The software architecture is designed with modularity in mind. This allows for easy upgrades and adaptability to changing requirements. Upgradable hardware components (processors, memory, SSD) future-proof the system, ensuring longevity and flexibility.

Optimized communication:



Communication with the energy aggregator via Modbus RTU over TCP/IP ensures seamless data exchange. Rigorous testing by Exide guarantees reliable communication before installation.

Cost savings and reliability:

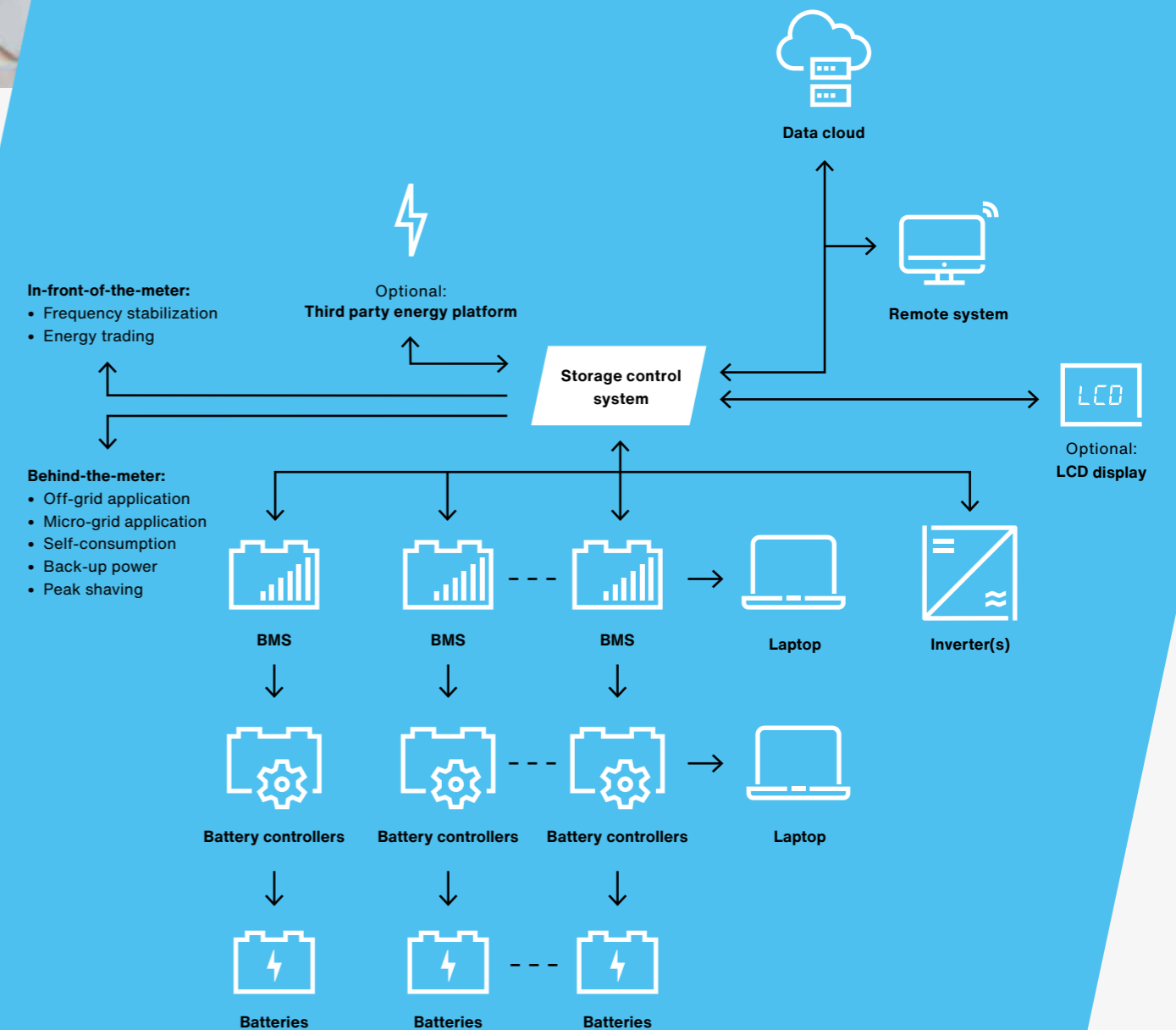


A unified control system reduces maintenance costs and simplifies troubleshooting. Reliable operation over a wide temperature range minimizes downtime and maximizes energy storage system availability.

Future-proof investment:



As technology evolves, the system can adapt through software and hardware upgrades. Customers benefit from a long-lasting, adaptable solution that keeps pace with industry advancements. In summary, the battery storage control system not only optimizes energy storage but also prioritizes safety, security, and long-term value for our customers.



Energy that goes beyond.



- Automotive plant
- Industrial plant
- R&D facility
- Recycling
- Global HQ
- Principal sales offices
+ sales offices and distribution centers worldwide



<p>All manufacturing plants ISO 9001 certified</p>	<p>All automotive plants IATF 16949 certified</p>	<p>All manufacturing plants ISO 14001 certified</p>	<p>All manufacturing plants ISO 50001 certified</p>	<p>Most manufacturing plants ISO 45001 certified</p>
---	--	--	--	---

**ENERGIZING
A NEW
WORLD**

EXIDE[®]
TECHNOLOGIES