MEGAPACK

Megapack is an all-in-one utility-scale energy storage system that is scalable to the space, power, and energy requirements of any site from 1 MWh to over 1 GWh. Megapack is optimized for cost, performance, and ease of installation, and includes a standard system warranty of up to 15 years.

FULLY INTEGRATED SYSTEM
Megapack ships with battery modules, bi-directional inverter, thermal management system, and AC main breaker all pre-installed and pre-tested within a single enclosure. This turnkey system is designed to have the industry’s fastest, lowest cost installation without sacrificing performance or reliability.

OPTIMIZATION SOFTWARE
Proprietary optimization software, developed in parallel with the Megapack hardware, learns and predicts local energy patterns, offering autonomous charge and discharge and seamless SCADA integration. Fast-response controls can integrate co-located renewables and enable market participation.

ENHANCED SYSTEM SAFETY
Parallel DC/DC converters, integrated heating and cooling at the cell level, and dedicated hazard venting are just a few of the safety and hazard mitigation features built into Megapack. Designed to meet international safety standards, Megapack helps ensure ease-of-permitting wherever it’s installed.

INDUSTRY-LEADING RELIABILITY
A vertically integrated product from hardware design and sourcing to software development, Megapack offers significant reliability advantages over the competition. These design advantages are exemplified by a cooling system optimized specifically for Megapack that provides superior heating and cooling while factoring its HVAC energy consumption into its performance, and module-level DC/DC converters that can keep the system running uninterrupted in case of a partial failure.

LOWEST ENGINEERING, PROCUREMENT, AND CONSTRUCTION (EPC) COSTS
Megapack is shipped onsite fully assembled and pre-tested, offering customers the world’s fastest utility-scale energy storage installation. Once on site, Megapack only requires seismic anchoring and connection of AC conductors and a communication cable. The EPC benefit is clear: no other current utility-scale solution offers such a simplified process.

GLOBAL SERVICE FOOTPRINT
As a vertically integrated manufacturer and supplier, Tesla provides a streamlined service offering on all components of Megapack. With Tesla, customers enjoy a single point of contact through all stages of product life. Our operational fleet of 2+ GWh provides valuable data that informs our maintenance models and our performance guarantees, and the entire Megapack system is covered by a standard warranty of up to 15 years, with the option of a 20-year Capacity Maintenance Agreement (CMA) in certain cases.
MEGAPACK SPECIFICATIONS

Specifications are subject to change.

Flexible offering designed for utility-scale projects
- Modular inverter Powerstages allow greater configuration flexibility
- Supports Capacity Maintenance Agreements (CMA)

Proven inverter and battery technology drives design efficiency
- One Megapack includes up to 17 independent battery modules
- Configurable for 2 to 6+ hour continuous charge/discharge
- Best-in-class round-trip efficiency and thermal system performance

Turnkey solution enables rapid and cost-effective deployment
- Up to 40% expected reduction in EPC costs compared to Powerpack
- Pre-assembled and pre-tested at Tesla’s Gigafactory
- No DC connections required onsite

STANDARD SYSTEM SPECIFICATIONS

Megapack is a customizable energy system capable of being sized according to customer needs.

AC Power / Energy Available per Megapack

<table>
<thead>
<tr>
<th></th>
<th>2-hour: Up to 1264.5 kW / 2529 kWh</th>
<th>4-hour: Up to 741.2 kW / 2964.8 kWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-hour Standard</td>
<td>1264.5 kW / 2529 kWh</td>
<td></td>
</tr>
<tr>
<td>2-hour Light</td>
<td>1011.6 kW / 2023.2 kWh</td>
<td></td>
</tr>
<tr>
<td>4-hour Standard</td>
<td>741.2 kW / 2964.8 kWh</td>
<td></td>
</tr>
<tr>
<td>4-hour Light</td>
<td>523.2 kW / 2092.8 kWh</td>
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</tbody>
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Round-Trip System Efficiency

<table>
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<td></td>
</tr>
<tr>
<td>4-hour Standard</td>
<td>90%</td>
</tr>
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Below are specifications for selected system sizes. A light Megapack is optimized for global payload limits. A standard Megapack has the maximum number of energy modules.

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1Nominal energy and RTE at 25°C (77°F) including thermal management loads, Day 1

MECHANICAL AND MOUNTING

Ingress Ratings
- IP66/NEMA 3R (Main enclosure)
- IP20 (Thermal system)

Enclosure Dimensions
- W: 7168 mm (282 1/4 in)
- D: 1659 mm (65 1/4 in)
- H: 2522 mm (99 1/4 in)

Maximum Shipping Weight
- Standard: 25,400 kg (56,000 lb)
- Light: 18,600 kg (41,000 lb)

Operating Ambient Temperature
- –30°C to 50°C (-22°F to 122°F)

REGULATORY (Expected Listings)

Lithium-Ion Cells
- NRTL listed to UL 1642

System
- NRTL listed to UL 1973, UL 9540, UL 9540A, UL 1741 SA, IEC 62619, IEC 62477-1
- IEEE 1547
- Compliant to grid codes and safety standards of all major markets

COMMUNICATIONS

Protocol
- Modbus TCP / DNP3 / Rest API

PART NUMBER

Megapack (all variants)
- 1462965-XX-Y
  (Where X is a number between 0-9 and Y is a letter. Changes to these do not affect product ratings.)