

MPS™-250 Bi-Directional Energy Storage Inverter Designed for Tesla Energy PowerPack



The MPS™-250 has been customized to be seamlessly integrated with the Tesla PowerPack. This inverter is designed specifically for four quadrant energy storage applications in both grid tied and microgrid applications.

Integrated Solution

Dynapower's MPS™-250 product offering is an integrated solution containing all required protective features, as well as an AC output breaker and DC disconnect switch to provide a fully integrated solution. This offers end users and energy storage integrators a cost advantage when compared to non-integrated systems requiring additional add-on items.

Dynamic Transfer

Dynapower's proprietary Dynamic Transfer algorithm monitors the grid stability and upon detecting a grid disturbance will disconnect from the grid connection and transition to stand alone mode on the load connection. The transition is seamless to the critical loads and supports full load imbalances.



Standard Features

- Integrated AC Breaker with Shunt Trip
- Integrated DC Disconnect
- Integrated DC Input Fuses
- DynaCloud™ - cloud-based remote monitoring and diagnostics
- Integrated Transformer
- Black Start

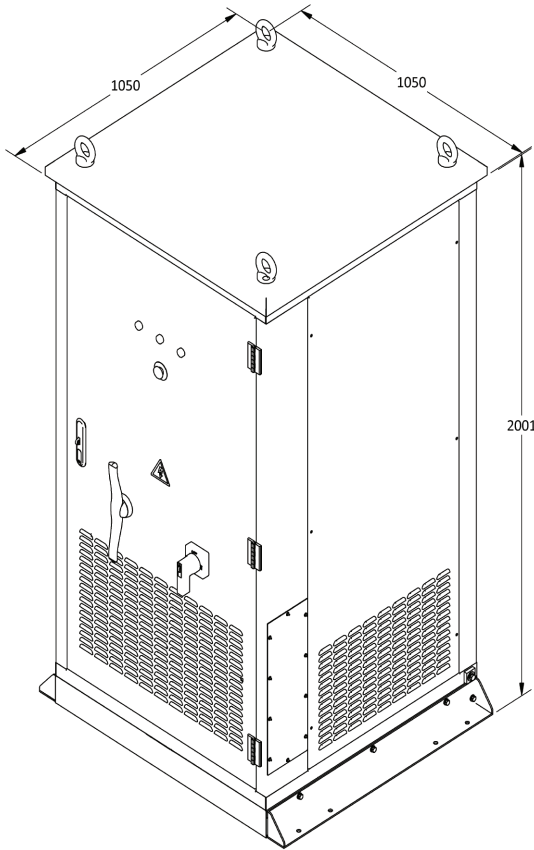
Experience

Having provided over 220 megawatts of power electronics for battery energy systems the Dynapower Energy Management team brings an unchallenged level of expertise and unrivaled knowledge base to our customers.

Dynapower's engineering team has designed and delivered energy storage systems globally including Asia, North America, Oceania and Australia of systems sized from 100 kW to 36,000 kW.



MPS™-250 Bi-Directional Energy Storage Inverter Specifications Designed for Tesla Energy Powerpack



Input Specifications

DC Voltage	350 - 600 VDC
Max DC Current	770 A
DC Voltage Ripple	<1%

Grid Connection

AC Line Voltage	400 VAC 3 Phase, +10%, -12%
AC Line Frequency	50 Hz (48-51 Hz) Field Settable
Continuous AC Current	361 A _{RMS}
Overload AC Current	433 A _{RMS}
Continuous AC Power	250 kW
Overload AC Power*	300 kW
Power Factor	0 - 1.00 Leading or Lagging
Current Harmonics	IEEE 1547 Compliant, <5% TDD
Peak Efficiency	96.0%

Environmental Specifications

Operating Temperature	-25 to 50°C, De-rated from 45 to 50°C
Cooling	Forced Air Cooled
Rated Max Elevation	1,000 Meters Full Power; Up to 3,000 Meters With Derating
Enclosure	IP 54
Dimensions (HxWxD)	2,001 x 1,050 x 1,050 mm
Weight	1,590 kgs

Additional Features

Faults	AC Over Voltage, AC Under Voltage, AC Under Frequency, AC Over Frequency, AC Overload, Over-temperature, DC Over Voltage, DC Over Current
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Standards Compliance	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 6100-6-2, IEC/EN 6100-6-4
Safety Features	Anti-islanding

User Interface

Remote Communication	ModBus TCP
Remote Monitoring	DynaCloud™ - Real time monitoring with automated alerts and data logging.

* 10 s overload, 10 minute recovery



About Dynapower Company

Dynapower Company LLC, based in South Burlington, VT is a global leader in the design and manufacture of standard and custom power conversion equipment including high power rectifiers, bi-directional inverters, control systems and transformers for use in energy storage, industrial, mining, military and research applications. Celebrating over 50 years of providing power electronic solutions to a global customer base, Dynapower's product scope includes discrete power electronics and fully integrated systems ranging from 10 kilowatts to 50 megawatts.