

Megablock

Build with MV Blocks

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Megablock is a medium-voltage AC energy storage block that is pre-engineered for longer life, higher energy, higher cycling capability, and reduced design complexity.

Megablock is designed to be offered as a whole assembly, with all major components provided by Tesla. It consists of two or more Megapack 3 battery units (Megapacks) and the medium-voltage assembly (MV assembly). The MV assembly provides the medium-voltage transformer (MV transformer), low-voltage connections between the Megapacks and the MV transformer (bus connector assemblies with LV bus bars), a medium-voltage protective device (MV switchgear), and a communications interface to the Tesla System Controller (Field Communicator). Key differentiators of the **Megablock** are larger battery modules, no low-voltage AC circuit breaker, and MV switchgear instead of transformer fuses, all of which lead to reduced deployment scope, lower installed cost, and reduced operational risk.



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Megapack 3 Battery Configurations

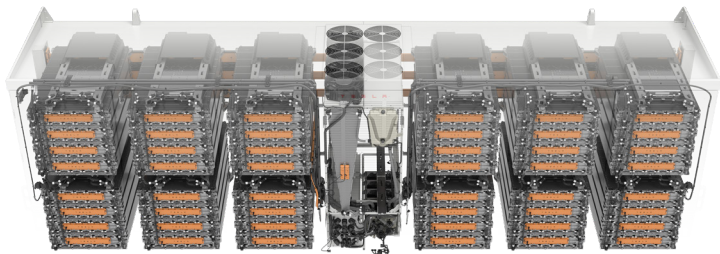
Megapack is configurable. Tesla-Standard Configurations are specified below.

Tesla-Standard Configurations		2-Hour	4-Hour	8-Hour
	Power per Megapack (kW AC)	2186	1206	603
	Energy per Megapack (kWh) ¹	4372	4826	4824
	Inverter power per Megapack (kVA) ²	3180	1596	798
	Round-trip efficiency per Megapack (%) ³	89.7	92.5	92.5
	Battery module options	BM01 BM02	BM01 BM02	BM01 BM02

¹ Nominal energy is specified at 25°C (77°F).
² Inverter power listed is maximum apparent power capability.
³ Full-depth cycle including all power conversion and thermal system losses, at 25°C (77°F).

Battery module options affect a Megapack unit's ratings. Selected characteristics of the available options are specified below.

Battery Module Options		Maximum Real Power per Megapack (kW)	Maximum Energy per Megapack (kWh)	Manufacturing Location
	BM01	2-Hour: 2385 4-Hour: 1206	2-Hour: 4770 4-Hour: 4826	Malaysia
	BM02	2-Hour: 2385 4-Hour: 1206	2-Hour: 4770 4-Hour: 4826	China
	BM03	4-Hour: 1171	4-Hour: 4686	United States
	BM04	4-Hour: 1185	4-Hour: 4743	United States
	BM05	2-Hour: 2273 4-Hour: 1142	2-Hour: 4547 4-Hour: 4569	China



The following specifications apply across all Megapack battery unit configurations.

Electrical Specifications	Nominal AC voltage	480 V AC 3-Phase
	Nominal frequency	50 or 60 Hz

Compliance Information	Product certifications ¹	UL 1973, UL 9540, UL 1642, IEC 62619, IEEE 1547
	Fire safety	Designed to meet and exceed UL 9540A testing

¹ Selected certifications. Designed to be compliant to grid codes and safety standards of all major markets.

Part Number	3100000-XX-Y	Where X is a number between 0 and 9 and Y is a letter
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Mechanical Specifications	Ingress ratings	IP66 / NEMA 3R (Main enclosure) IP2X (Thermal bay)
	Operating ambient temperature	-40°C to 50°C (-40°F to 122°F)
	Shipping weight ²	39,010 kg (86,000 lb)

² For Tesla-Standard Configurations.

Enclosure dimensions

