

POWERWALL

The Tesla Powerwall is a wall-mounted battery system for residential or light commercial use. Its rechargeable lithium-ion battery pack provides energy storage for solar self-consumption, load shifting, backup power, or any high-throughput application. Powerwall's electrical interface is provided by an internal isolated bi-directional DC/DC converter that controls the charge and discharge of the battery for integration with utility-interactive solar inverters.

Powerwall achieves unprecedented levels of safety in home energy storage. It is a factory assembled, fully certified unit that contains no user-serviceable parts. The microprocessor controlled DC/DC converter is electrically isolated from the internal battery and eliminates user access to voltage on the unit's field wiring terminals for installation, service or shutdown.



ELECTRICAL SPECIFICATIONS

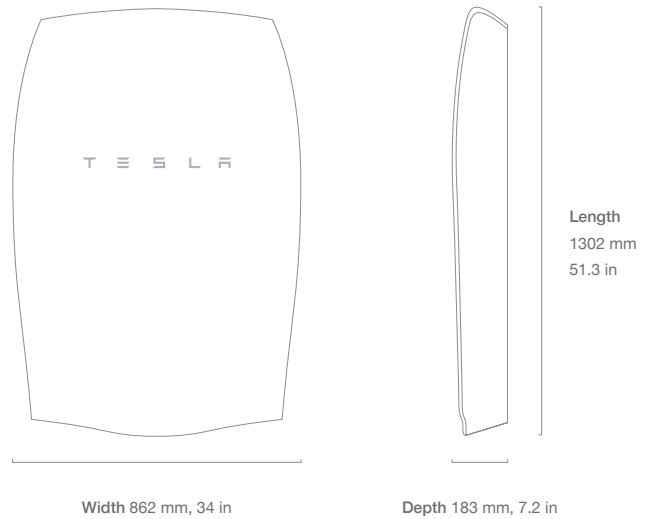
Power, continuous and peak	3.3 kW
Energy ¹	6.4 kWh
Internal Battery Voltage	< 50 VDC
System Operating Voltage	350 V – 450 V
Voltage in OFF State	0 VDC
Current	9.5 ADC
Round Trip Efficiency ¹	92.5 % (for a 400V-450V DC bus)
Depth of Discharge	100%
Equivalent Cycles ²	Equivalent to 1 full cycle per day for 10 years

¹ Values provided for 25°C (77°F), 2kW charge/discharge power.

² User is not penalized for partial cycles. Two partial 50% cycles are equivalent to one full cycle.

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-20°C to 50°C (-4°F to 122°F)
Maximum humidity	<95% non-condensing
Maximum altitude	<95% non-condensing
Impact Rating	IK09
Ingress Rating	IP35 & NEMA 3R (Powerwall) IP67 (Battery Pod)



MECHANICAL SPECIFICATIONS

Dimensions	1302 mm (51.3 in.) x 862 mm (34 in.) x 183 mm (7.2 in.)
Weight	97 kg (214 lbs)

CERTIFICATIONS

Powerwall	UL 9540, AC156 seismic certification, IEEE 693-2005 seismic certification, FCC Part 15 Class B, IEC/EN 61000 Class B
Battery/Pod	UL 1642, UL 1973, UN 38.3, REACH, Battery Directive 2006/66/EC, RoHS Directive 2011/65/EU, WEEE Directive 2012/19/EU, IEC 62109-1, IEC 62619, CSA C22.2.107.1