Tesla Powerwall is a fully-integrated AC battery system for residential or light commercial use. Its rechargeable lithium-ion battery pack provides energy storage for solar self-consumption, time-based control, and backup.

Powerwall's electrical interface provides a simple connection to any home or building. Its revolutionary compact design achieves market-leading energy density and is easy to install, enabling owners to quickly realise the benefits of reliable, clean power.



PERFORMANCE SPECIFICATIONS

AC Voltage (Nominal)	230 V
Feed-In Type	Single Phase
Grid Frequency	50 Hz
Total Energy ¹	14 kWh
Usable Energy ¹	13.5 kWh
Real Power, max continuous	5 kW (charge and discharge)
Apparent Power, max continuous	5 kVA (charge and discharge)
Rated Grid Output Current	25 A
Rated Backup Output Current	25 A
Maximum Supply Fault Current	10 kA
Maximum Output Fault Current	32 A
Power Factor Output Range	+/- 1.0 adjustable
Internal Battery DC Voltage	50 V
Round Trip Efficiency ^{1,2}	90%
Warranty	10 years ³

¹Values provided for 25°C, 3.3 kW charge/discharge power.

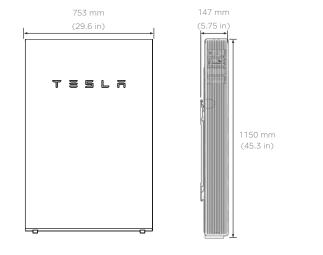
COMPLIANCE INFORMATION

Certifications	IEC 62109-1, IEC 62109-2, IEC 62619, UN 38.3
Grid Connection	Worldwide Compatibility
Emissions	IEC 61000-6-1, IEC 61000-6-3
Environmental	RoHS Directive 2011/65/EU, WEEE Directive 2012/19/EU, Battery Directive 2006/66/EC, REACH Regulation
Seismic	AC156, IEEE 693-2005 (high)
Country of Manufacture	USA

MECHANICAL SPECIFICATIONS

Dimensions ⁴	1150 mm x 753 mm x 147 mm
Weight	114 kg
Mounting options	Floor or wall mount

⁴Dimensions differ slightly if manufactured before March 2019. Contact Tesla for additional information.



ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-20°C to 50°C
Recommended Temperature	0°C to 30°C
Operating Humidity (RH)	Up to 100%, condensing
Storage Conditions	-20°C to 30°C Up to 95% RH, non-condensing State of Energy (SoE): 25% initial
Maximum Elevation	3000 m
Environment	Indoor and outdoor rated
Ingress Rating	IP67 (Battery & Power Electronics) IP56 (Wiring Compartment)
Wet Location Rating	Yes
Noise Level @ 1m	< 40 dBA at 30°C

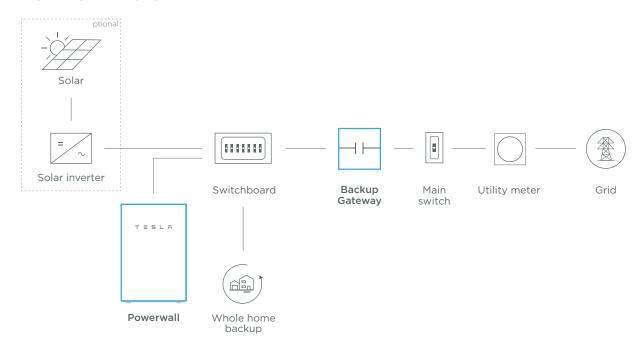
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²AC to battery to AC, at beginning of life.

³Refer to Tesla Powerwall Warranty for Terms and Conditions.

TYPICAL SYSTEM LAYOUTS

WHOLE HOME BACKUP



PARTIAL HOME BACKUP

