

POWERWALL

Tesla Powerwall 2 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, load shifting, backup, and off-grid use.

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 realize the benefits of reliable, clean power.



PERFORMANCE SPECIFICATIONS

AC Voltage (Nominal)	208 V, 220 V, 230 V, 100/200 V, 120/240 V
Feed-In Type	Single & Split Phase
Grid Frequency	50 and 60 Hz
Total Energy ¹	14 kWh
Usable Energy ¹	13.5 kWh
Real Power, max continuous ²	5 kW (charge and discharge)
Real Power, peak (10s) ²	7 kW (discharge only)
Apparent Power, max continuous ²	5.8 kVA (charge and discharge)
Apparent Power, peak (10s) ²	7.2 kVA (discharge only)
Imbalance for Single-Phase Loads	100%
Power Factor Output Range	+/- 1.0 adjustable
Power Factor (full-rated power)	+/- 0.85
Depth of Discharge	100%
Internal Battery DC Voltage	50 V
Round Trip Efficiency ^{1,3}	> 90%
Warranty	10 years

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

²Values region-dependent.

³AC to battery to AC, at beginning of life.

COMPLIANCE INFORMATION

Safety	UL 1642, UL 1741, UL 1973, UL 9540, UN 38.3, IEC 62109-1, IEC 62619, CSA C22.2.107.1
Grid Standards	Worldwide Compatibility
Emissions	FCC Part 15 Class B, ICES 003, EN 61000 Class B
Environmental	RoHS Directive 2011/65/EU, WEEE Directive 2012/19/EU, 2006/66/EC
Seismic	AC156, IEEE 693-2005 (high)

MECHANICAL SPECIFICATIONS

Dimensions	1150 mm x 755 mm x 155 mm
Weight	125 kg
Mounting options	Floor or wall mount

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-20°C to 50°C
Operating Humidity (RH)	Up to 100%, condensing
Maximum Altitude	3000 m
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 3R
Ingress Rating	IP67 (Battery & Power Electronics) IP56 (Wiring Compartment)
Noise Level @ 1m	< 40 dBA at 30°C

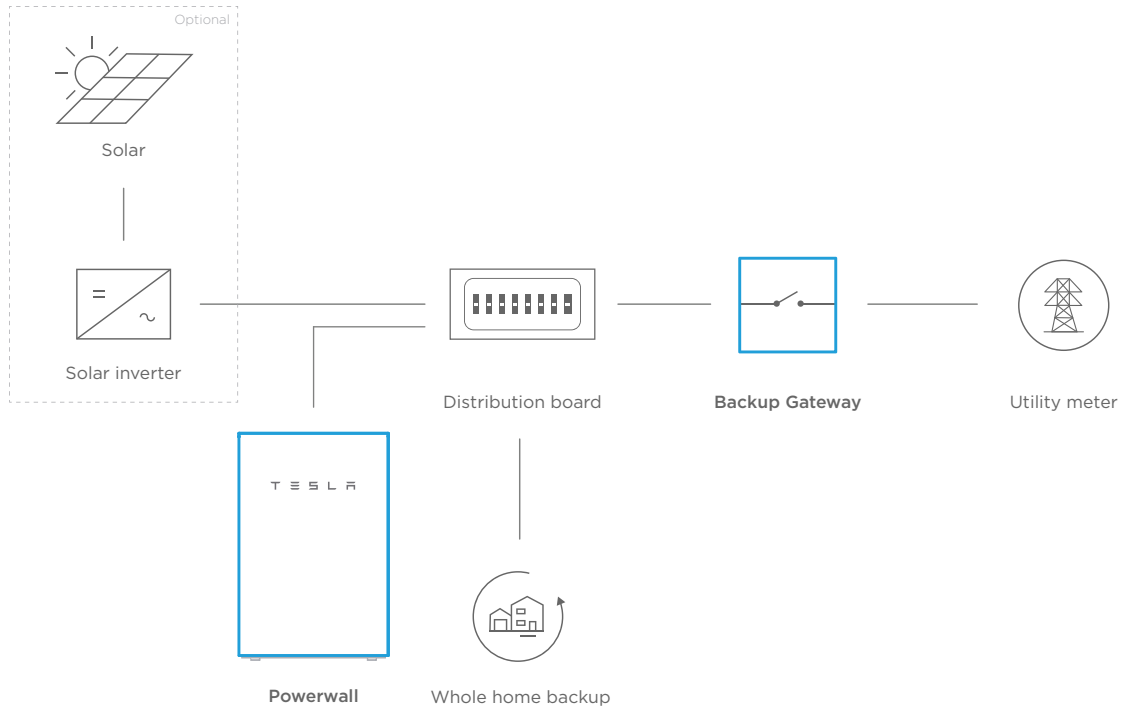
BACKUP GATEWAY SPECIFICATIONS

Dimensions	691 mm x 378 mm x 129 mm
Weight	16.4 kg
Disconnect Current	200 A
Enclosure Type	NEMA 3R
Ingress Rating	IP44
Overcurrent Protection Breaker ⁴	100–200 A
User Interface	Tesla App
Connectivity	Wi-Fi, Ethernet, 3G ⁴
AC Meter	Revenue grade
Operating Modes	Support for solar self-consumption, load shifting, backup, and off-grid use
Backup Operation	Automatic disconnect for seamless backup transition
Modularity	Supports up to 10 AC-coupled Powerwalls

⁴Optional

TYPICAL SYSTEM LAYOUTS

WHOLE HOME BACKUP



PARTIAL HOME BACKUP

