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, 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 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 ²	3.68 kW (charge and discharge)
Apparent Power, max continuous ²	3.68 kVA (charge and discharge)
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

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

GATEWAY SPECIFICATIONS

Dimensions	240 mm x 243 mm x 130 mm
Weight	2 kg
Enclosure Type	NEMA 4
Ingress Rating	IP65
User Interface	Tesla App
Connectivity	Wi-Fi, Ethernet, 3G ⁴
AC Meter	Revenue grade
Operating Modes	Support for solar self-consumption, load shifting, and off-grid use
Modularity	Supports up to 10 AC-coupled Powerwalls

⁴³G optional

 $^{^1\}mbox{Values}$ provided for 25°C, 3.3 kW charge/discharge power. $^2\mbox{Limited}$ for G83 grid code compliance; capable of 5 kW/5.8 kVA continuous.

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

