

# POWERWALL

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 realize the benefits of reliable, clean power.



## PERFORMANCE SPECIFICATIONS

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

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

<sup>2</sup>In Backup mode, grid charge power is limited to 3.3 kW.

<sup>3</sup>AC to battery to AC, at beginning of life.

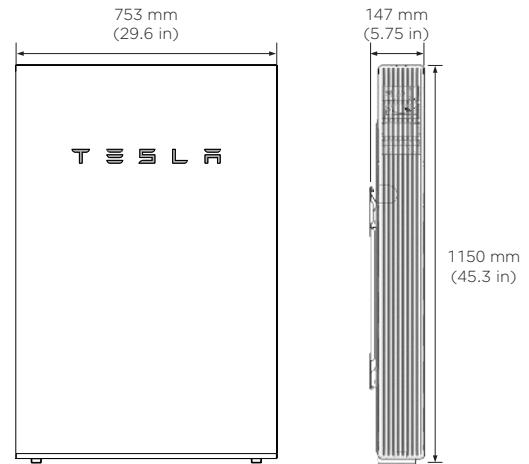
## COMPLIANCE INFORMATION

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

## MECHANICAL SPECIFICATIONS

|                               |                           |
|-------------------------------|---------------------------|
| <b>Dimensions<sup>1</sup></b> | 1150 mm x 753 mm x 147 mm |
| <b>Weight</b>                 | 114 kg                    |
| <b>Mounting options</b>       | Floor or wall mount       |

<sup>1</sup>Dimensions and weight differ slightly if manufactured before March 2019. Contact Tesla for additional information.

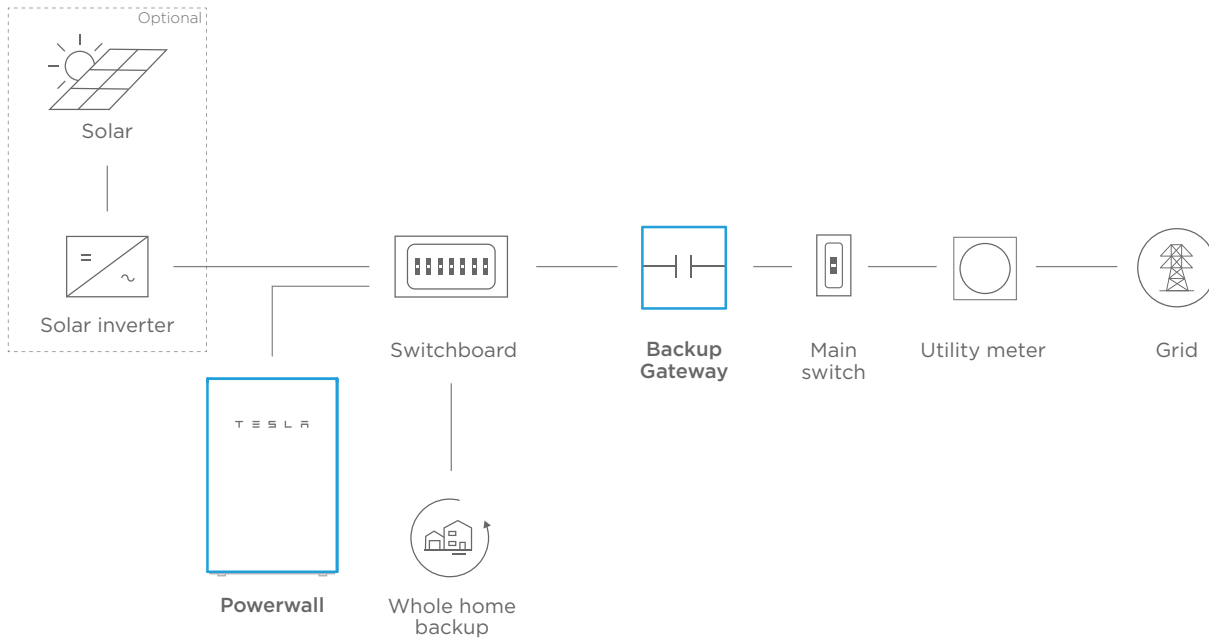


## ENVIRONMENTAL SPECIFICATIONS

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

# TYPICAL SYSTEM LAYOUTS

## WHOLE HOME BACKUP



## PARTIAL HOME BACKUP

