Powerwall 3

Power Everything

—

Powerwall 3 is a fully integrated solar and battery system, designed to accelerate the transition to sustainable energy. Customers can receive whole home backup, cost savings, and energy independence by producing and consuming their own energy while participating in grid services. Once installed, customers can manage their system using the Tesla App to customize system behavior to meet their energy goals.

Powerwall 3 achieves this by supporting up to 20 kW DC of solar and providing 11.5 kW AC of continuous power per unit. It has the ability to start heavy loads up to 150 A LRA, meaning a single unit can support the power needs of most homes. Powerwall 3 is designed for mass production, fast and efficient installations, easy system expansion, and simple connection to any electrical service.

2023

Powerwall 3 Technical Specifications

System Technical Specifications

Model Number	1707000-xx-y
Nominal Grid Voltage (Input & Output)	120/240 VAC
Grid Type	Split phase
Frequency	60 Hz
Overcurrent Protection Device	Configurable up to 60 A
Solar to Battery to Grid Round Trip Efficiency	89% [1,2]
Solar to Grid Efficiency	97% [3]
Supported Islanding Devices	Backup Gateway 2, Backup Switch
Connectivity	Wi-Fi (2.4 and 5 GHz), Dual-port switched Ethernet, Cellular (LTE/4G [4])
Hardware Interface	Dry contact relay, Rapid Shutdown (RSD) certified switch and 2-pin connector, RS-485 for meters
AC Metering	Revenue Grade (+/- 0.5%)
Protections	Integrated arc fault circuit interrupter (AFCI), Isolation Monitor Interrupter (IMI), PV Rapid Shutdown (RSD) using Tesla Mid-Circuit Interrupters
Customer Interface	Tesla Mobile App
Warranty	10 years

Solar Technical Specifications

Maximum Solar STC Input	20 kW
Withstand Voltage	600 V DC
PV DC Input Voltage Range	60 — 550 V DC
PV DC MPPT Voltage Range	150 — 480 V DC
MPPTs	6
Maximum Current per MPPT (I_{mp})	13 A [5]
Maximum Short Circuit Current per MPPT (I_{sc})	15 A [5]

Battery Technical Specifications

Nominal Battery Energy	13.5 kWh AC [2]
Maximum Continuous Discharge Power	11.5 kW AC
Maximum Continuous Charge Power	5 kW AC
Output Power Factor Rating	0 - 1 (Grid Code configurable)
Maximum Continuous Current	48 A
Maximum Output Fault Current	10 kA
Load Start Capability (1 s)	150 A LRA
Power Scalability	Up to 4 Powerwall 3 units supported

[1] Typical solar shifting use case.

[2] Values provided for 25°C (77°F), at beginning of life. 3.3 kW charge/discharge power.

[3] Tested using CEC weighted efficiency methodology.

[4] Cellular connectivity subject to network service coverage and signal strength.

[5] Where the DC input current exceeds the MPPT rating, a jumper can be used to combine two MPPTs into a single input to intake DC current up to 26 A I_{MP} / 30 A I_{SC}.

Powerwall 3 Technical Specifications

Environmental Specifications

Operating Temperature	–20°C to 50°C (–4°F to 122°F) [6]
Operating Humidity (RH)	Up to 100%, condensing
Storage Temperature	–20°C to 30°C (–4°F to 86°F), up to 95% RH, non-condensing, State of Energy (SOE): 25% initial
Maximum Elevation	3000 m (9843 ft)
Environment	Indoor and outdoor rated
Enclosure Rating	NEMA 3R
Ingress Rating	IPX7 (Battery & Power Electronics) IPX5 (Wiring Compartment)
Pollution Rating	PD3
Operating Noise @ 1 m	< 50 db(A) typical <62 db(A) maximum

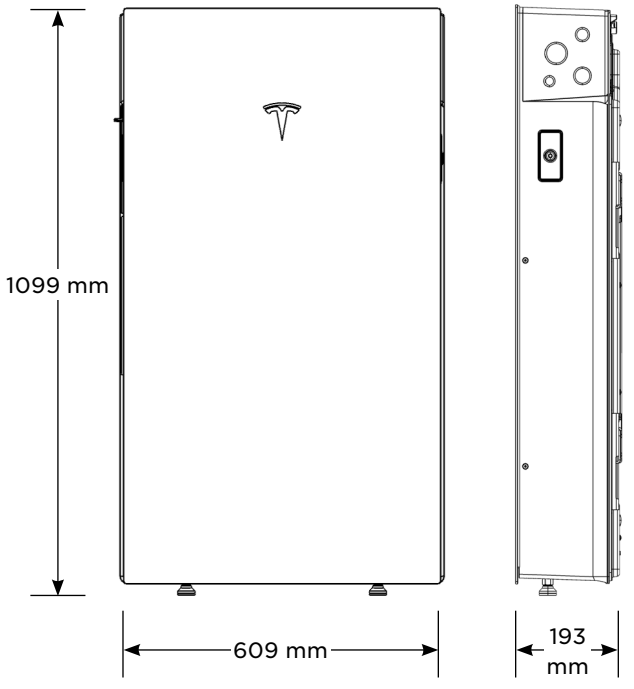
[6] Performance may be de-rated at operating temperatures above 40°C (104°F).

Compliance Information

Certifications	UL 1642, UL 1699B, UL 1741, UL 1741 SA, UL 1741 SB, UL 3741, UL 1973, UL 1998, UL 9540, IEEE 1547-2018, IEEE 1547.1, UN 38.3
Grid Connection	United States
Emissions	FCC Part 15 Class B
Environmental	RoHS Directive 2011/65/EU
Seismic	AC156, IEEE 693-2005 (high)
Fire Testing	Meets the unit level performance criteria of UL 9540A

Mechanical Specifications

Dimensions	1099 x 609 x 193 mm (43.25 x 24 x 7.6 in)
Weight	130 kg (287 lb)
Mounting Options	Floor or wall mount



Solar Shutdown Device Technical Specifications

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The Solar Shutdown Device is a Mid-Circuit Interrupter (MCI) and is part of the PV system rapid shutdown (RSD) function in accordance with Article 690 of the applicable NEC. When paired with Powerwall 3, solar array shutdown is initiated by any loss of AC power.

Electrical Specifications

Model	MCI-1	MCI-2
Nominal Input DC Current Rating (I_{MP})	12 A	13 A
Maximum Input Short Circuit Current (I_{SC})	19 A	17 A
Maximum System Voltage (PVHCS)	600 V DC	1000 V DC [7]

[7] Maximum System Voltage is limited by Powerwall to 600 V DC.

RSD Module Performance

Maximum Number of Devices per String	5	5
Control	Power Line Excitation	Power Line Excitation
Passive State	Normally Open	Normally Open
Maximum Power Consumption	7 W	7 W
Warranty	25 years	25 years

Environmental Specifications

Operating Temperature	-40°C to 50°C (-40°F to 122°F)	-45°C to 70°C (-49°F to 158°F)
Storage Temperature	–30°C to 70°C (–22°F to 158°F)	–30°C to 70°C (–22°F to 158°F)
Enclosure Rating	NEMA 4X / IP65	NEMA 4X / IP65

Mechanical Specifications

Electrical Connections	MC4 Connector	MC4 Connector
Housing	Plastic	Plastic
Dimensions	125 x 150 x 22 mm (5 x 6 x 1 in)	173 x 45 x 22 mm (6.8 x 1.8 x 1 in)
Weight	350 g (0.77 lb)	120 g (0.26 lb)
Mounting Options	ZEP Home Run Clip M4 Screw (#10) M8 Bolt (5/16") Nail / Wood screw	Wire Clip

Compliance Information

Certifications	UL 1741 PVRSE, UL 3741, PVRSA (Photovoltaic Rapid Shutdown Array)
RSD Initiation Method	External System Shutdown Switch or Powerwall 3 Enable Switch

UL 3741 PV Hazard Control (and PVRSA) Compatibility

The following categories of solar module meet the UL 3741 PVHCS listing when installed with Powerwall 3 and Solar Shutdown Devices.

Tesla Solar Roof	PV Hazard Control System: BIPV compliance document
Tesla or Hanwha (Q.Peak Duo BLK or BLK-G6+) Modules certified for use with ZEP racking	PV Hazard Control System: ZS PVHCS compliance document
Other module and racking combinations	PV Hazard Control System: Generic PV Array compliance document

Backup Gateway 2

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Backup Gateway 2 controls connection to the grid when paired with Powerwall 3, automatically detecting outages and providing seamless transition to backup power. Backup Gateway 2 also provides energy metering for solar self-consumption, time-based control, and backup operation.

In this system configuration, Powerwall 3 acts as the Site Controller, with the Backup Gateway 2 Site Controller disabled.

Performance Specifications

Model Number	1232100-xx-y
AC Voltage (Nominal)	120/240 V
Feed-in Type	Split phase
Grid Frequency	60 Hz
Current Rating	200 A
Maximum Supply Short Circuit Current	10 kA [8]
Overcurrent Protection Device	100 - 200 A, Service entrance rated [8]
Overvoltage Category	Category IV
Internal Primary AC Meter	Revenue accurate (+/- 0.2%)
Internal Auxiliary AC Meter	Revenue accurate (+/- 2%)
Primary Connectivity	Ethernet, Wi-Fi
Secondary Connectivity	Cellular (3G, LTE/4G) [9]

User Interface	Tesla App
Operating Modes	Support for solar self-consumption, time-based control, and backup
Backup Transition	Automatic disconnect for seamless backup
Modularity	Supports up to 10 AC-coupled Powerwalls
Optional Internal Panelboard	200 A 6-space / 12 circuit breakers Siemens QP or Square D HOM breakers rated 10 - 80A or Eaton BR breakers rated 10 - 125A
Warranty	10 years

[8] When protected by Class J fuses, Backup Gateway 2 is suitable for use in circuits capable of delivering not more than 22kA symmetrical amperes.

[9] The customer is expected to provide internet connectivity for Backup Gateway 2; cellular should not be used as the primary mode of connectivity. Cellular connectivity subject to network operator service coverage and signal strength.

Environmental Specifications

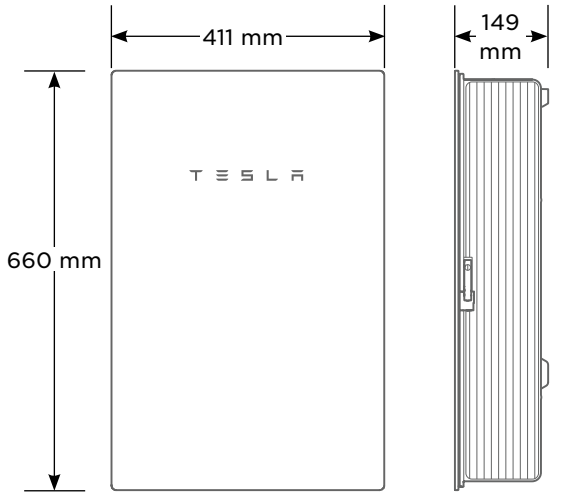
Operating Temperature	–20°C to 50°C (–4°F to 122°F)
Operating Humidity (RH)	Up to 100%, condensing
Maximum Elevation	3000 m (9843 ft)
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 3R

Compliance Information

Certifications	UL 67, UL 869A, UL 916, UL 1741 PCS, CSA 22.2 0.19, CSA 22.2 205
Emmissions	FCC Part 15, ICES 003

Mechanical Specifications

Dimensions	660 x 411 x 149 mm (26 x 16 x 6 in)
Weight	20.4 kg (45 lb)
Mounting options	Wall mount, Semi-flush mount



Backup Switch

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The Tesla Backup Switch controls connection to the grid in a Powerwall system, and can be easily installed behind the utility meter or in a standalone meter panel downstream of the utility meter.

The Backup Switch automatically detects grid outages, providing a seamless transition to backup power. It communicates directly with Powerwall, allowing home energy usage monitoring from any mobile device with the Tesla app.

Performance Specifications

Model Number	1624171-xx-y
Continuous Load Rating	200 A, 120/240 V split phase
Maximum Supply Short Circuit Current	22 kA with breaker [10]
Communication	CAN
AC Meter	Revenue accurate (+/- 0.5%)
Expected Service Life	21 years
Warranty	10 years

[10] Breaker maximum supply short circuit current rating must be equal to or greater than the available fault current.

Environmental Specifications

Operating Temperature	–40°C to 50°C (–40°F to 122°F)
Storage Temperature	–40°C to 85°C (–40°F to 185°F)
Enclosure Rating	NEMA 3R
Pollution Rating	PD3

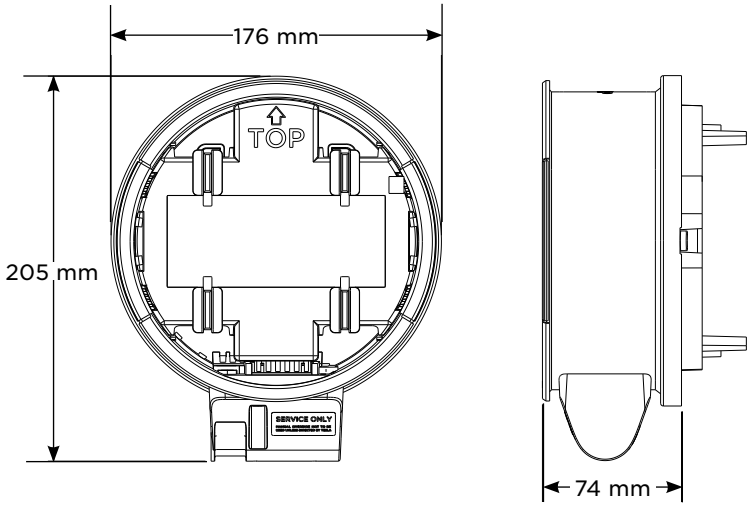
Compliance Information

Safety Standards	USA: UL 414, UL 2735, UL 916, CA Prop 65
Emmissions	FCC, ICES

Mechanical Specifications

Dimensions	176 x 205 x 74 mm (6.9 x 8.1 x 2.9 in)
Weight	2.8 lb
Meter and Socket Compatibility	ANSI Type 2S, ringless or ring type
External Service Interface	Contactor manual override [11]
	Reset button
Conduit Compatibility	1/2-inch NPT

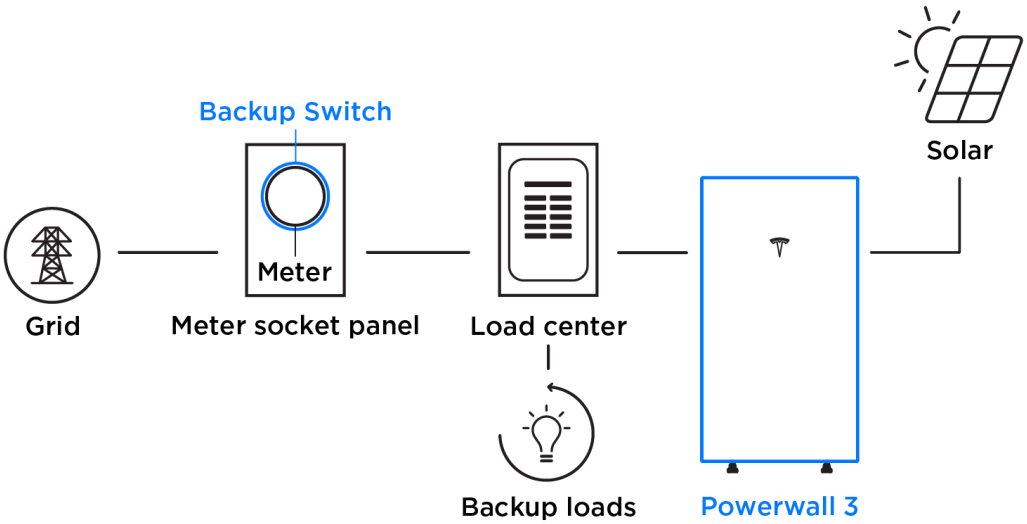
[11] Manually overrides the contactor position during a service event.



Powerwall 3 Example System Configurations

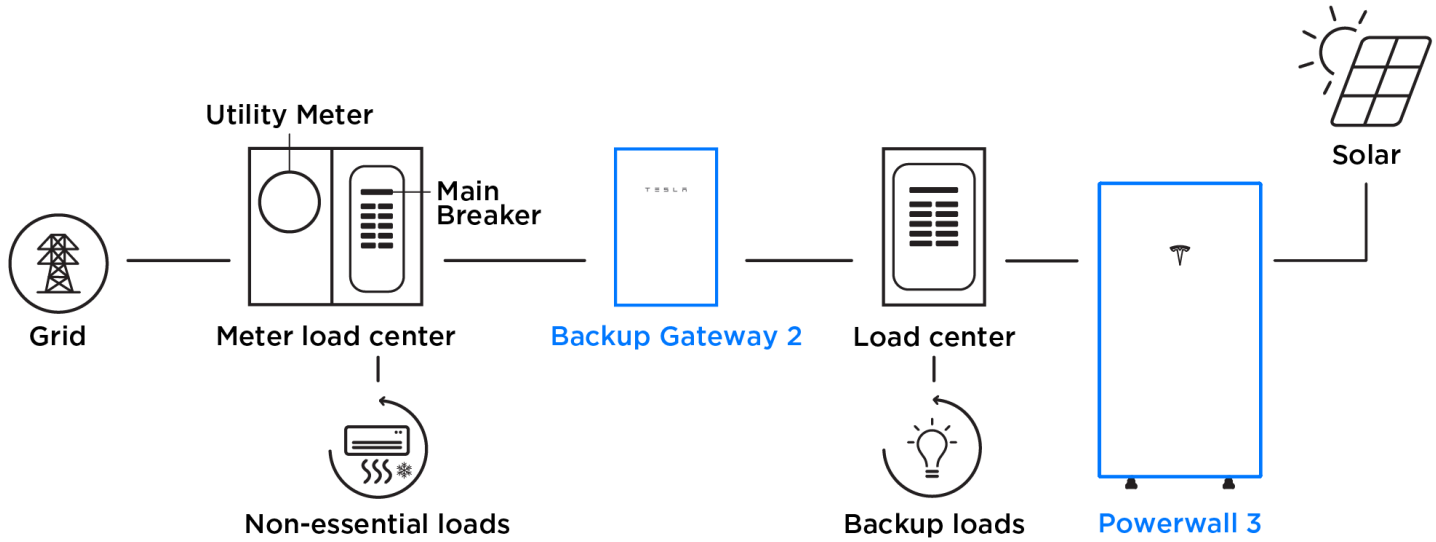
Powerwall 3 with Backup Switch

Whole Home Backup



Powerwall 3 with Backup Gateway 2

Partial Home Backup



SPAN Panel Limited Warranty (USA)

Effective Date: December 1, 2023

SPAN Panel Limited Warranty

WHAT PRODUCTS ARE COVERED

To be entitled to the benefits of this limited warranty (this "Limited Warranty"), your SPAN Panel must: (1) be purchased from SPAN or a SPAN authorized reseller; (2) be installed by a SPAN Authorized Installer in the United States of America or Puerto Rico; and (3) have the following part numbers: 1-00200-xx or 1-00800-xx where "xx" is any alphanumeric style code used for SPAN internal reference. As used herein, the term "SPAN Authorized Installer" means a person or entity in the business of installing electrical equipment (such as solar photovoltaic or energy storage systems), has an electrical license as required by all applicable laws, rules, regulations and ordinance of local governmental authorities having jurisdiction over the original address of installation (the "Original Address"), has completed SPAN-approved training, and meets and maintains SPAN Authorized Installer program requirements.

Contact Support

WHO CAN MAKE A CLAIM

Limited Warranty claims can only be made by or on the behalf of the original purchaser who purchased the SPAN Panel or other subsequent transferee of the

SPAN Panel at the Original Address who provides proof of ownership of such SPAN Panel.

WHAT IS COVERED AND FOR HOW LONG

Subject to the terms and conditions set forth in this Limited Warranty, each SPAN Panel shall be free from defects in materials and manufacturing workmanship for a period of ten (10) years commencing on the day that the SPAN Panel is installed at the Original Address (the "Warranty Term"). The Warranty Term is not extended if your SPAN Panel is repaired or replaced under this Limited Warranty; only the remainder of the original Warranty Term will apply to the repaired or replacement SPAN Panel.

YOUR SOLE REMEDY

If SPAN confirms the existence of a defect that is covered by this Limited Warranty, SPAN will, in its sole discretion, either repair your SPAN Panel (using new or refurbished parts), replace your SPAN Panel with an equivalent product (new or refurbished), or refund you the market price of the SPAN Panel at the time of the warranty claim. For warranty replacements, SPAN will cover the actual costs of labor and dispatch of service personnel to complete the replacement, up to a maximum amount of $500.

Making a Warranty Claim

If you need to file a claim under this Limited Warranty, please contact the SPAN Authorized Installer who installed your SPAN Panel. If you are unable to contact your SPAN Authorized Installer, please submit a service request by contacting SPAN Support using the contact information set forth at the end of this document.

For a Limited Warranty claim to be processed, it must include (i) proof of ownership of your SPAN Panel; (ii) a description of the alleged defect(s); and (iii) your SPAN Panel's original installation date, part number and serial number.

Prior to returning any products, you must obtain a return authorization number from SPAN. Return shipping for the original product is the responsibility of the end user or SPAN Authorized Installer, and all returned products must be

securely wrapped and packaged as directed or instructed by SPAN to avoid shipping damage.

DISCLAIMER OF WARRANTIES

THIS LIMITED WARRANTY IS THE ONLY EXPRESS WARRANTY SPAN PROVIDES FOR THE SPAN PANEL, AND THE ABOVE REMEDY IS YOUR SOLE REMEDY. SPAN LIMITS THE DURATION AND REMEDIES OF ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS OR SUFFICIENCY FOR A PARTICULAR USE OR PURPOSE, NON-INFRINGEMENT, AND ANY WARRANTY ARISING FROM A COURSE OF DEALING OR USAGE OF TRADE, TO THE DURATION OF THIS EXPRESS WARRANTY. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, SPAN SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ORAL OR WRITTEN, STATUTORY OR OTHERWISE. SPAN DOES NOT WARRANT THAT THE SPAN PANEL WILL OPERATE UNINTERRUPTED, BE ERROR-FREE OR THAT ALL ERRORS CAN BE CORRECTED. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY THE SPAN AUTHORIZED INSTALLER OR ANY SPAN PERSONNEL SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS LIMITED WARRANTY.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

GENERAL EXCLUSIONS

This Limited Warranty does not apply to any defect or loss of product functionality resulting from any of the following: (i) abuse, misuse, improper handling, negligence, rust, or corrosion; (ii) accidents or force majeure events, including without limitation lightning, flood, earthquake, fire or other events beyond the reasonable control of SPAN; (iii) installation, commissioning, or repair of your SPAN Panel or SPAN Panel components that is performed by anyone other than SPAN or a SPAN Authorized Installer; (iv) failure to service, maintain, or repair the electrical system connected to or landed in your SPAN Panel according to the laws, standards, or requirements of the authority having jurisdiction; (v) failure to install, operate, service, maintain, or repair your SPAN Panel in accordance with the SPAN Panel Owner's Manual, SPAN Panel Installation Manual, SPAN Panel Datasheet, and any other instructions, documentation, or notices provided or made available by SPAN, including through the SPAN Tech Portal (available at techportal.span.io) or on the SPAN

Panel itself (collectively, the "Documentation"); (vi) installation of your SPAN Panel other than in accordance with all applicable local electrical, fire, and building codes and regulations; (vii) any attempt to modify or modification of your SPAN Panel, whether by physical means, programming or otherwise, without the express written consent of SPAN; (viii) removal and reinstallation of your SPAN Panel at a location other than the Original Address without the express written consent of SPAN; (ix) installation of your SPAN Panel on a mobile structure or dwelling such as an RV or mobile home; (x) failure of any remote firmware update to the SPAN Panel as a result of a failure of your internet connection; (xi) causes external to your SPAN Panel including without limitation objects striking your SPAN Panel, faulty or damaged electrical wiring or connections, external electrical faults, circuit breakers or junction boxes; (xii) any damage done to your SPAN Panel by any components or parts not compatible with your SPAN Panel; (xiii) failure to contact SPAN upon discovery of a defect covered by this Limited Warranty; or (xiv) use of your SPAN Panel for commercial purposes.

Without limiting the foregoing, this Limited Warranty does not cover (a) normal wear and tear of your SPAN Panel; (b) superficial defects, dents or marks that do not impact the performance of your SPAN Panel; or (c) theft of your SPAN Panel or any of its components.

If a claim is made under this Limited Warranty and SPAN or a SPAN Authorized Installer determines that the claim is not covered by this Limited Warranty, you will be liable for and shall pay for all field charges for labor or other expenses incurred in connection with such claim.

EXCLUSION FOR FAILURE TO CONNECT TO THE INTERNET OR FAILURE TO COMMISSION YOUR SPAN PANEL

In order to provide this Limited Warranty for the Warranty Term, SPAN requires the ability to remotely update the firmware of your SPAN Panel. Installation of these remote updates may briefly interrupt the operation of your SPAN Panel. By installing your SPAN Panel and connecting it to the internet, you consent to SPAN updating your SPAN Panel remotely on occasion without further notice to you. If your SPAN Panel is not connected to the internet for an extended period, or has not been commissioned with SPAN in accordance with the Documentation, including the creation of your account in the SPAN Home app, then we may not be able to provide important remote firmware updates to

ensure best functionality. SPAN may try to notify you when your SPAN Panel's internet connection is lost. However, if you have not registered your SPAN Panel or created an account as aforesaid, this may not be possible. If SPAN cannot honor this Limited Warranty for the Warranty Term because the SPAN Panel is not connected to the internet for an extended period, has not been commissioned with SPAN, or has not had a homeowner account created for it in the SPAN Home app, then we will still honor this Limited Warranty for a period of four (4) years commencing on the day that the SPAN Panel is installed to the Original Address, subject to the limitations and exclusions set out in this Limited Warranty.

LIMITATION OF LIABILITY

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, SPAN SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL, EXEMPLARY, OR PUNITIVE DAMAGES ARISING OUT OF OR RELATED TO THIS LIMITED WARRANTY, INCLUDING, BUT NOT LIMITED TO, LOSS OF VEHICLE VALUE, LOSS OF TIME, LOSS OF INCOME, LOSS OF USE, LOSS OF PERSONAL OR COMMERCIAL PROPERTY, REGARDLESS OF WHETHER CLAIMS FOR SUCH DAMAGES ARE BASED ON CONTRACT, TORT, WARRANTY OR ANY OTHER LEGAL THEORY, EVEN IF ADVISED OR OTHERWISE AWARE OF THE POSSIBILITY OF SUCH DAMAGES. SPAN'S LIABILITY ARISING OUT OF A CLAIM UNDER THIS LIMITED WARRANTY SHALL NOT EXCEED THE AMOUNT YOU PAID FOR YOUR SPAN PANEL (EXCLUDING LABOR AND OTHER COSTS OF INSTALLATION).

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

LIMITATION OF USE

YOUR SPAN PANEL IS NOT INTENDED FOR USE WITH LIFE-SUPPORT SYSTEMS, OTHER MEDICAL EQUIPMENT, OR ANY OTHER USE WHERE PRODUCT FAILURE OR REMOTE SWITCHING OF ELECTRICAL CIRCUITS COULD LEAD TO INJURY TO PERSONS OR LOSS OF LIFE. SPAN DISCLAIMS ANY AND ALL LIABILITY ARISING OUT OF ANY SUCH USE OF YOUR SPAN PANEL.

APPLICABLE LAW

This warranty gives you specific legal rights, and you may also have other rights which vary from State to State. The terms of this Limited Warranty will apply to the extent permitted by applicable law.

SPAN Contact Details

If you have any questions regarding this Limited Warranty or would like to submit a claim, please contact our customer support team using one of the following methods:

- SPAN Support website: **support.span.io**
- SPAN Support email: **support@span.io**
- SPAN address: ATTN: SPAN Warranty Claims, 168 Welsh St, San Francisco, CA 94107

Additional Documents

SPAN Limited Warranty for systems purchased June 1, 2020 - May 19, 2021

SPAN Limited Warranty for systems purchased May 20, 2021 - March 23, 2023

SPAN Limited Warranty for systems purchased March 24, 2023 - November 30, 2023

[1] Savings will vary based on individual energy use.

[2] Results from an internal study of SPAN Panel managing backup load priorities in over 1,200 simulated outage situations.
Individual results will vary.

[3] Savings will vary based on individual energy use.

+ Pecan Street Analysis, 2021

^ PG&E | Service Upgrades for Electrification Retrofits Study Final Report, May, 2022

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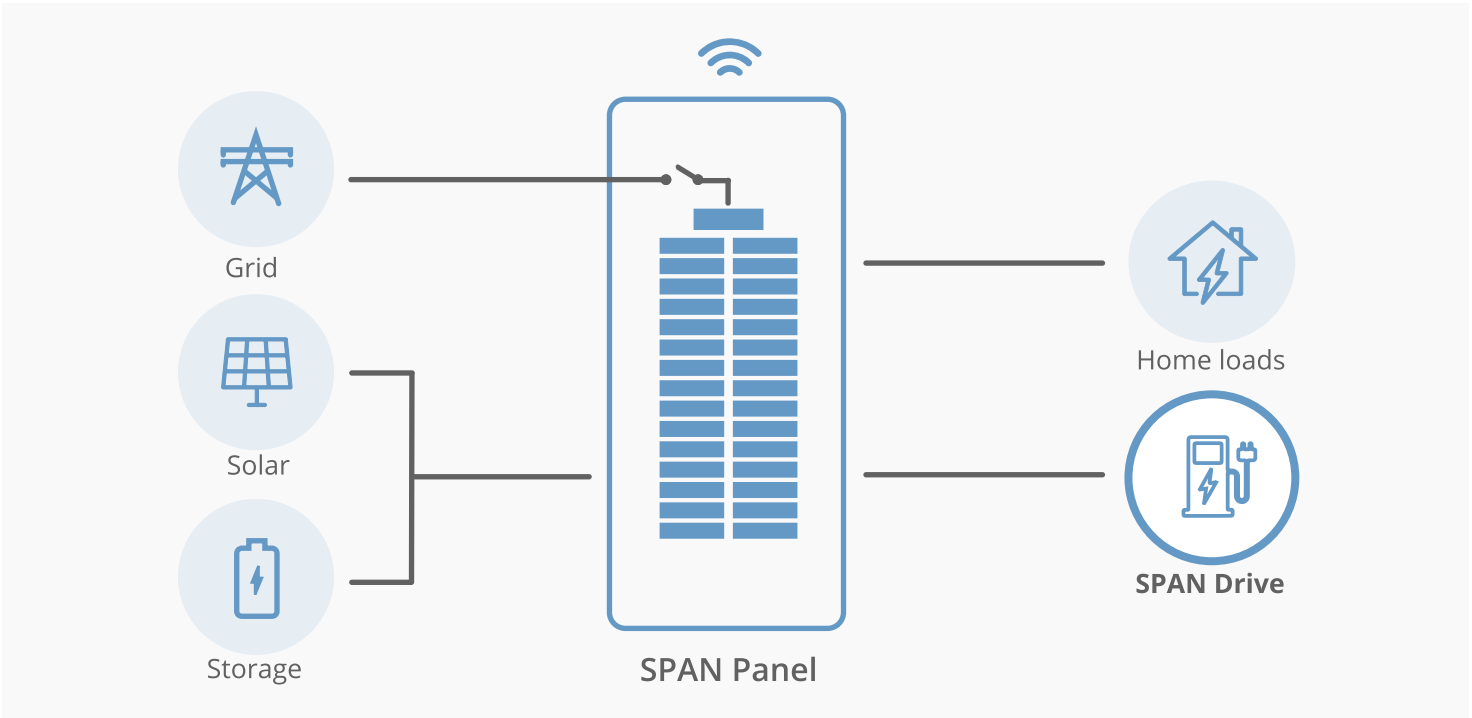
SPAN Drive Datasheet

SPAN Drive is the first level 2 vehicle charger designed for real-time coordination with all home loads for max charging speeds and optimized energy usage without costly home electrical upgrades.

- **Pairs with your home** to dynamically use as much energy as is available, delivering up to 48 amps (11.5 kW) — 1.5x the rate of typical Level 2 chargers
- **Unlocks level 2 charging for *any* home** without needing to make any expensive electrical service upgrades
- **Looks as good as it performs** and blends effortlessly with indoor and outdoor spaces as a worthy companion to your sleek EV



Performance Specifications

Max Power	11.52 kW (48 A)
AC Voltage (Nominal)	208 - 240 V single-phase
Grid Frequency	50 / 60 Hz
Output Current	6 - 48 A (configurable)
Max Continuous Current	48 A (60 A breaker)
AC Energy Metering	+/- 1%
Connectivity	RS485 Connection to SPAN Panel
User Interfaces	SPAN Home® App (iOS, Android), Onboard status illumination
Ground Fault Circuit Interrupter	Integrated (CCID20)
Limited Warranty	3 years

Mechanical Specifications

Connector Type	SAE J1772
Cable Length	20 ft (6.1 m)
Dimensions	17.9 x 5.9 x 3.1 in (455 x 150 x 80 mm)
Mounting Options	Wall mounted
Weight	16 lbs (7.2 kg)

Environmental Specifications

Operating Temperature	-22 to 122ºF (-30 to 50ºC)[1]
Operating Humidity (RH)	Up to 100% condensing
Environment	Indoor and Outdoor (NEMA 3R)
Maximum Elevation	3000 m (9842 ft)[1]

[1]Drive units installed above 2000m must be installed in ambient temperatures less than 104ºF (40ºC).

Compliance Information

Certifications	UL 2594, UL 2231 ENERGY STAR® (PN 1-01400-04 and later)
Emissions	FCC Part 15 Class B
More	Meets NEC Art. 625 requirements

Additional Features

- Dynamic charge management for service upgrade avoidance
- Charge on schedule
- Lock Drive to prevent unwanted charging sessions
- Coming soon: Solar charging, Off-grid charge optimization, Multiple Drives per Panel and power sharing

Compatibility

SPAN Drive is sold exclusively as an accessory to SPAN Panel and is not supported as a standalone charger. Drive can be used with any Battery or Plug-In Hybrid Electric Vehicle (BEV/PHEV) that is compliant with SAE J1772 (including Tesla).

Become an Authorized Installer

Learn more at www.span.io/partners

We envision a future where every home is electric and technologies like solar, batteries, and EV charging are commonplace. Our goal is to enable this transition by dramatically simplifying the adoption of clean energy solutions, many of which exist today. This is our decade to decarbonize—join us on our mission.