

TESLA
POWERWALL
CERTIFIED INSTALLER



PROSOLAR MICRO-GRID PROPOSAL



A Customized ProSolar Proposal For:

Little Saint James Island
Little St James Island, St Thomas 00802,
USVI



Your ProSolar Sales Representative:

Brad Spernak



ProSolar Systems LLC
FL License # CBC1250110
PO Box 15694, Tallahassee FL 32317



4.2 Megawatt-hours of TESLA POWERPACKS
+ 643.65 kW of Premium LG Solar Panels

ENERGY SECURITY

MONTHLY SAVINGS \$22,661
YEARLY SAVINGS \$271,933

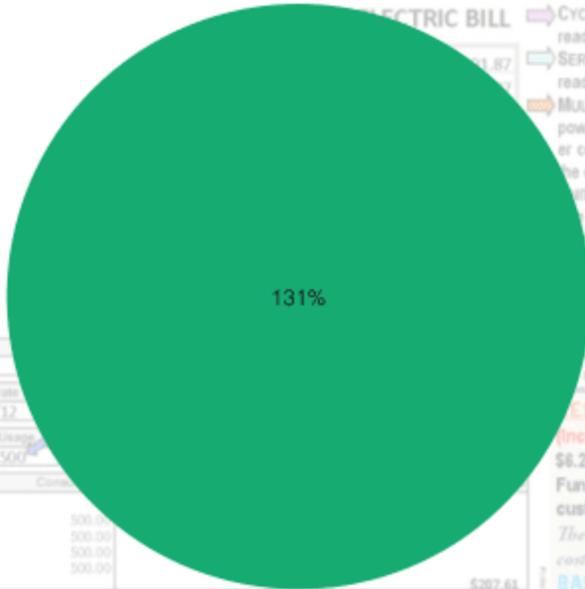
8.0 yr Payback



TWENTY
210 KILOWATT-HOUR TESLA POWERPACK

ONE
650 KILOWATT BI-DIRECTIONAL TESLA INVERTER

WAPA Customer
 Address
 City State Zip Code



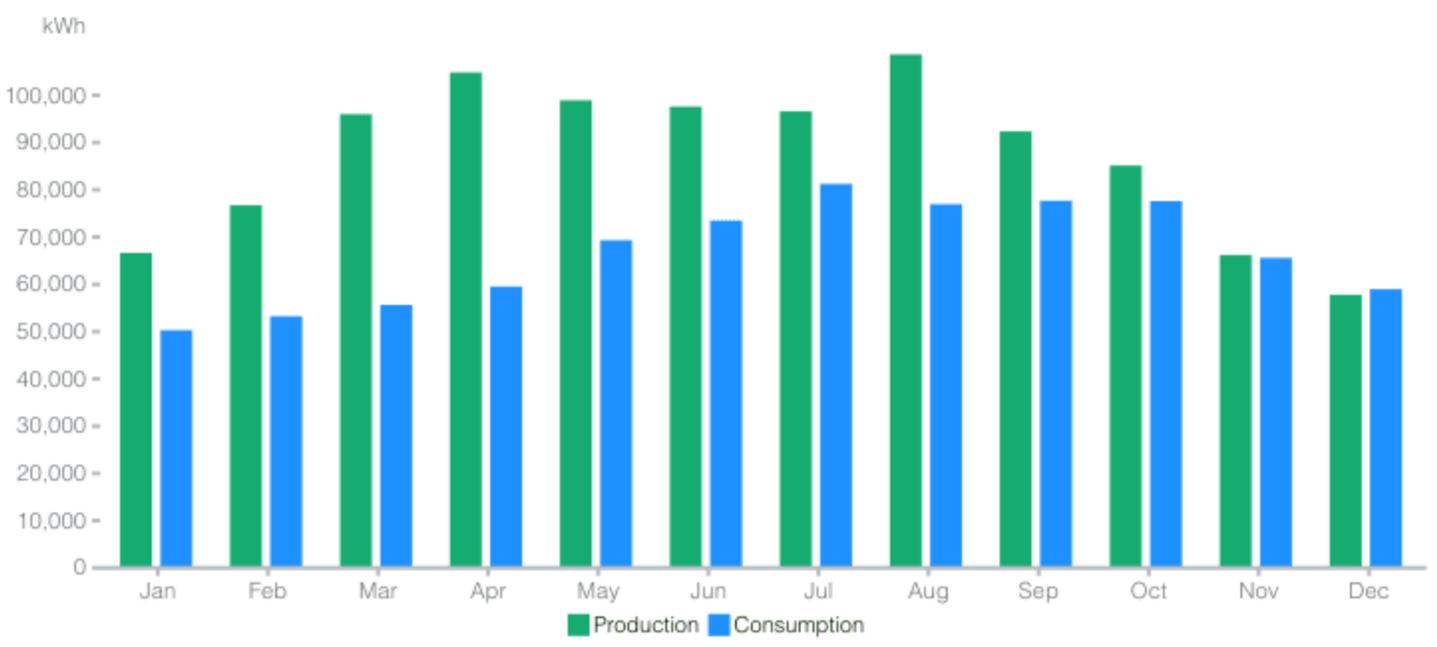
ELECTRIC BILL

-  **CYCLE** - Method used to categorize customer areas for meter reading
-  **SERVICE PERIOD/DAYS** - The number of days within the meter reading cycle.
-  **MULTIPLIER** - In order to accurately and safely measure your power use, electric meters record a fixed ratio of the total power consumed. The multiplier shown on your bill is multiplied by the change in readings to obtain the actual consumption.
- UNITS** - A kilowatt hour (kWh) is a unit of energy equivalent to one kilowatt (1 kW) of power extended for one hour (1 h) of time. For example: A 1000 watt (1 kW) appliance operating for one hour uses 1 kWh.
- CURRENT/PREVIOUS/USAGE** - The kWh usage is determined by the difference between last month's reading (previous) and this month's new reading (current).
- AVERAGE COST PER DAY** - Total amount of the bill divided by the number of days in the service period.

Service Address				
SMITH BAY 421G				
Cycle	Bill Date	Due Date		
65-03	9/19/12	10/9/12		
Multiplier	Units	Current	Previous	Usage
1.000	KWH	14766	14266	500
Service				
UNLTD SUR @ 2.00000				500.00
SPCL PRG @ 2.00000				500.00
UNLTD SUR @ 5.00000				500.00
PILOT SUR @ 1.00000				500.00
UNLTD SUR @ 2.00000				500.00
TOTAL ELECTRIC				\$287.61

RESIDENTIAL CUSTOMER CHARGE
 (increase effective August 1, 2012)
 \$6.22 per single phase OR \$13.24 per three phase
 Funds administrative costs of providing service to the customer.
The charges below are calculated by multiplying the cost per kWh by the consumption.
BASE RATE (Formerly Consumption Charge)

■ Solar ■ Utility



Turn-key System Summary

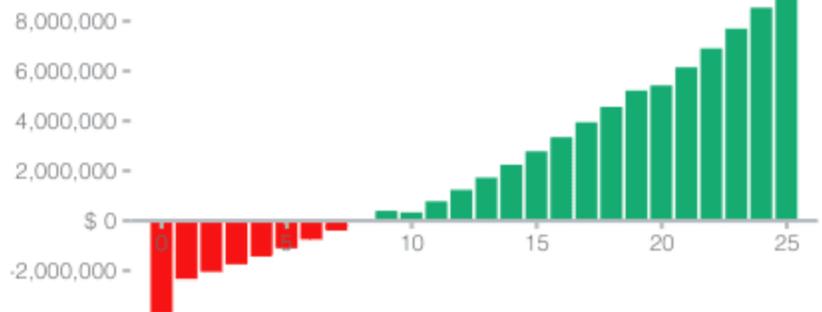
System Size in DC kW	643.65
Total Solar Modules Installed	1,839
Installed Cost of Your PV System	\$3,713,861
Total Potential Tax Benefit:	
Federal Investment Tax Credit	\$1,114,158
System Cost After Incentives (cash purchased)	\$2,599,702
Projected Yearly Production	1,047,460 kWh
Average Year 1 Monthly Savings	\$22,661
Warranted Life of System Savings	\$12,978,583
Levelized Cost of Electricity	\$0.14 / kWh

You Will Save:

\$12,978,583

Over The Warranted Lifetime of The System - PV modules have a life expectancy up to 25 years!

Cashflow over time





POWERPACK LAYOUT

Powerpack Systems installed in enclosed areas must provide a minimum 4' wide access around the sides of the equipment to access the front of each Powerpack Unit (Figure 19). This access is required for service cart access and is required to be level (maximum 5% cross slope).

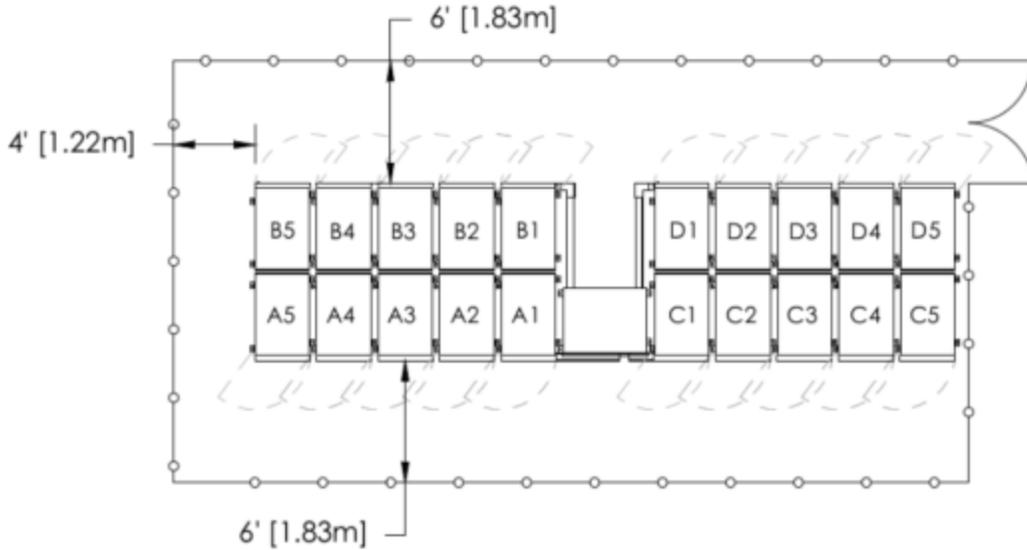
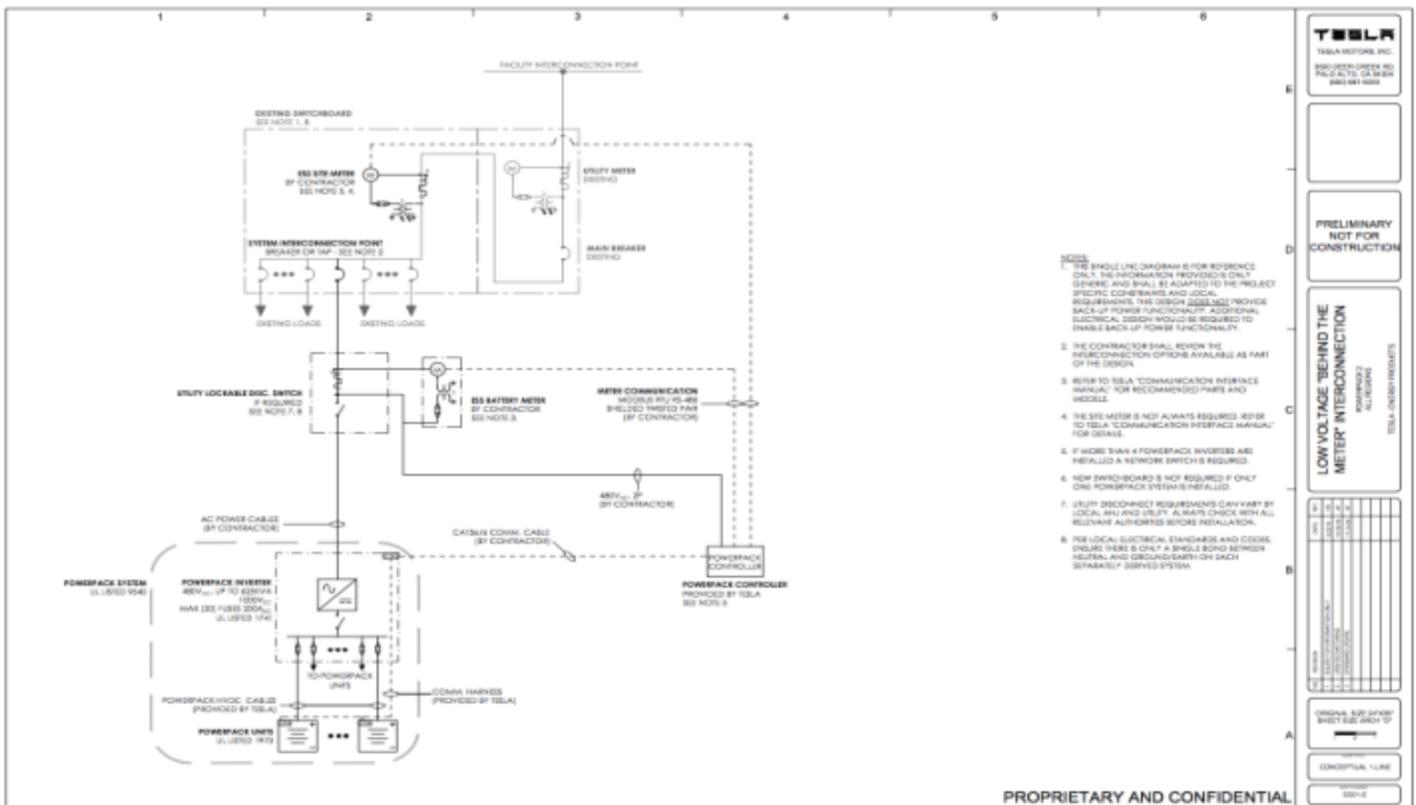


Figure 19: Minimum Access Clearance to Powerpack Units

Equipment rows longer than 200' shall provide an interior access road at least 12 feet wide (Figure 20). Access to the equipment does not need to be paved, but must be compacted.



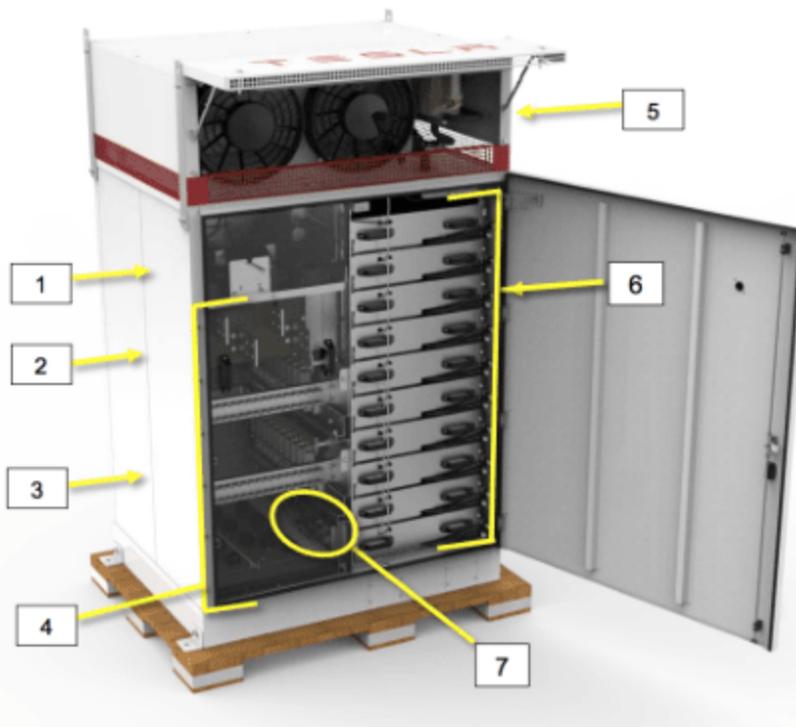


Figure 4: Powerpack Inverter Overview

1. Low voltage boards	5. Thermal management
2. AC bus bars	6. Powerstages
3. DC bus bars and fuses	7. Interface board
4. Customer connection area	

One Powerpack Inverter, and 1-20 Powerpack Units assigned to that inverter, make up an **inverter block**. The number of Powerpack Units per inverter can be scaled for energy, to meet the required hour ratings of the system (for example two, three, or four hours). The number of inverter blocks can be scaled to meet the required power ratings of the system (for example, 1 MW, 5 MW, or 50 MW).

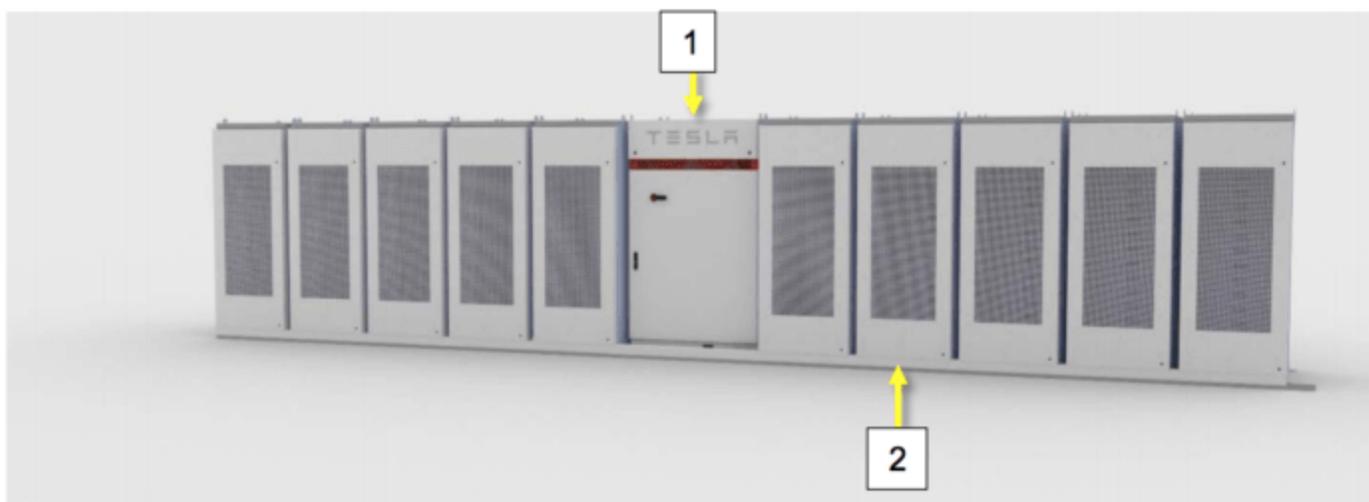


Figure 1: Rendering of a 4-Hour Inverter Block: Powerpack Inverter (1) and Powerpack Units (2)



POWERPACK 2 SYSTEM LIMITED WARRANTY (USA)

Effective Date: September 27, 2017

Applies to: Any Tesla Powerpack 2 system that is supplied by Tesla, Inc. ("Tesla") or its affiliate for installation within the United States of America and to which this Limited Warranty is expressed to apply in the System purchase agreement (each, the "System").

1. **Limited Warranty.** Tesla warrants that the System shall (a) conform to the Specifications¹ on the Original Sale Date²; (b) be free from defects in design, workmanship and materials as set out in [Exhibit 1](#); and (c) retain energy capacity as set out in [Exhibit 1](#).
2. **No Extensions.** If the System, or any component, is repaired or replaced under this Limited Warranty, the remainder of the periods referenced in [Exhibit 1](#) shall apply to the repaired or replacement system. Under no circumstance shall any such period be extended on account of any warranty repair or replacement.
3. **Remedies.** If a valid claim is submitted in accordance with the procedures described in this Limited Warranty, Tesla shall, in its sole discretion, (a) repair the defective System or component, (b) replace the defective System or component with an equivalent System or component (or, if Tesla or the manufacturer of such component has discontinued manufacture of such component, a mutually acceptable alternative component), or (c) where permitted in [Exhibit 2](#), pay Energy Shortfall Damages (as defined in [Exhibit 2](#)). Tesla shall inform System owner of its remedy election in writing within 10 days of Tesla's validation of the claim. If Tesla repairs or replaces the defective System, Tesla shall also be responsible for the costs of teardown, disassembly, transportation, re-assembly and re-installation of the System or component (or their respective replacements).
4. **Items Not Covered.** This Limited Warranty does not cover (a) normal wear and tear or deterioration, or superficial defects, dents or marks that do not impact System performance; (b) vibration that does not impact System performance; (c) damage that occurs during shipping or transportation (other than shipping or transportation by or on behalf of Tesla); (d) defects or performance issues resulting from use of the System outside the "Operating Temperature" range set out in the Specifications; (e) defects or performance issues resulting from the commissioning, operation, maintenance, modification or repair of the System in violation of the applicable Tesla Manual³, other than by Tesla or its affiliate or subcontractor; (f) defects or performance issues resulting from abuse, negligence, accidents or force majeure events, including but not limited to lightning, flood, earthquake, fire, or other events outside the reasonable control of Tesla; (g) damage or deterioration that occurs after the expiration or voiding of this Limited Warranty or that is reported more than 10 days after the expiration or voiding of this Limited Warranty; or (h) theft or vandalism of the System or any of its components. A failure of the System to retain energy capacity as set out in [Exhibit 1](#) shall not constitute a "defect" for purposes of [Section 1\(b\)](#) or [Exhibit 1](#).
5. **Exclusions.** Each of the following shall permanently void this Limited Warranty: (a) installation, commissioning, maintenance, modification or repair of the System by anyone other than Tesla, its affiliate or a Tesla approved technician; and (b) removal and reinstallation of the System at a different location without the written consent of Tesla. Each of the following shall permanently void this Limited Warranty when performed by anyone other than Tesla or its affiliate or subcontractor: (i) installation of the System in contravention of the "Powerpack System 2 Installation Manual", (ii) storage of the System in contravention of the "Powerpack System 2 Storage Guidelines" or in violation of the "Storage Conditions (on the shelf)" set out in the "Environmental Specifications" section of the Specifications; and (iii) any attempt to extend or reduce the life of the System or prevent or hinder the recovery of data regarding System usage.

¹ **Specifications** means the "Powerpack System Specifications" referenced in the System purchase agreement.

² **Original Sale Date** means the date that risk of loss of the System transferred to the original buyer under the System purchase agreement.

³ **Tesla Manuals** means the System manuals published on Tesla Partner Portal ([https://\[REDACTED\]](https://[REDACTED])).

6. **Exclusive Remedies.** This Limited Warranty is provided voluntarily and does not constitute an independent guarantee. **TO THE FULLEST EXTENT PERMITTED BY LAW, THIS LIMITED WARRANTY AND THE REMEDIES SET FORTH HEREIN ARE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL, WRITTEN, STATUTORY, EXPRESS OR IMPLIED (INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, USE OR APPLICATION, AND ANY WARRANTIES AGAINST LATENT OR HIDDEN DEFECTS), ALL OF WHICH ARE EXPRESSLY DISCLAIMED. TO THE EXTENT THAT SUCH WARRANTIES CANNOT BE DISCLAIMED, TESLA LIMITS THE DURATION OF AND REMEDIES FOR SUCH WARRANTIES TO THE DURATIONS AND REMEDIES DESCRIBED HEREIN.**

7. **Limitation of Liability.** **IN NO EVENT WILL TESLA BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES ARISING OUT OF OR RELATED TO THIS LIMITED WARRANTY, REGARDLESS OF THE FORM OF ACTION AND REGARDLESS OF WHETHER A PARTY HAS BEEN INFORMED OF, OR OTHERWISE MIGHT HAVE ANTICIPATED, THE POSSIBILITY OF SUCH DAMAGES. . IN NO EVENT WILL TESLA'S LIABILITY ARISING OUT OF OR RELATED TO LIMITED WARRANTY CLAIMS WITH RESPECT TO AN INDIVIDUAL SYSTEM EXCEED THE SYSTEM PRICE⁴. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF DAMAGES, INCLUDING INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY, OR MAY ONLY APPLY TO A LIMITED EXTENT.**

8. **Limitation on Use.** **THE SYSTEM IS NOT INTENDED FOR USE AS A PRIMARY OR BACK-UP POWER SOURCE FOR LIFE-SUPPORT SYSTEMS OR OTHER MEDICAL EQUIPMENT. TESLA DISCLAIMS ANY LIABILITY ARISING OUT OF ANY SUCH USE OF THE SYSTEM, RESERVES THE RIGHT TO REFUSE TO SERVICE THE SYSTEM IF USED FOR THESE PURPOSES AND DISCLAIMS ANY LIABILITY ARISING OUT OF TESLA'S SERVICE OF, OR REFUSAL TO SERVICE, ANY SUCH SYSTEM.**

9. **Governing Law; Dispute Resolution; Venue.** This Limited Warranty will be governed by and interpreted in accordance with the laws of the State of California. The United Nations Convention on Contracts for the International Sale of Goods will not apply to this Limited Warranty. Any dispute arising from or relating to this Limited Warranty shall first be promptly referred to the senior level management of Tesla and the System owner for resolution. If the dispute is not resolved within 20 days after referral, then either party may take such dispute to binding arbitration in accordance with the then-current Streamlined Arbitration Rules of the Judicial Arbitration and Mediation Services ("**JAMS**"). The existence, content and result of the arbitration shall be held in confidence by Tesla and the System owner, their representatives, any other participants and the arbitrator. The arbitration will be conducted by a single arbitrator selected by agreement of Tesla and the System owner or, failing such agreement, appointed in accordance with the JAMS rules. The arbitration shall be conducted in English and in San Francisco, California. Tesla and the System owner will each bear its own expenses in the arbitration and will share equally the costs of the arbitration; provided, however, that the arbitrator may, in its discretion, award reasonable costs and fees to the prevailing party.

10. **Claims Process.** Claims under this Limited Warranty must be made by notifying Tesla at the email address identified below. For a claim to be processed, proof of the original purchase of the System and any subsequent transfers of ownership of the System need to accompany the claim. The claim must include a description of any alleged defect as well as the relevant System's serial number, Original Sale Date and Commissioning Date. If the claim is contested by Tesla, it shall be the System owner's responsibility to show that the defect or energy capacity shortfall is covered by this Limited Warranty and that none of the exclusions in this Limited Warranty apply. Prior to returning any System or component to Tesla, a Return Merchandise Authorization number is required. This may be obtained by contacting Tesla at the email address, address or telephone number identified below.

⁴ **System Price** means the purchase price paid to Tesla for the System, as shown in the System purchase agreement. If you did not purchase the System direct from Tesla, you should contact Tesla to confirm the System Price.

Exhibit 1 – Limited Warranty Periods

Years 1 through 10 following Commissioning Date

The System shall be free from defects in design, workmanship and materials during years 1 through 10 following the Commissioning Date⁵, and the Actual Energy Retention Percentage⁶ shall be equal to or greater than the applicable “Minimum Energy Retention Percentage” below until the below periods have expired or (if earlier) the Aggregate Discharge Throughput⁷ exceeds the below “Aggregate Discharge Throughput Limitation”.

Period (Warranty Years⁸ following Commissioning Date)	Aggregate Discharge Throughput Limitation	Minimum Energy Retention Percentage
1	348	95%
2	679	91%
3	996	88%
4	1302	83%
5	1599	79%
6	1889	77%
7	2173	75%
8	2451	73%
9	2725	71%
10	2994	70%

Extension to Years 11-15 following Commissioning Date, for low utilization scenario

This section only applies if the Aggregate Discharge Throughput during the first 10 years following the Commissioning Date is equal to or less than 2,040kWh per kWh of Nameplate Energy Capacity⁹. The System shall be free from defects in design, workmanship during years 11 through 15 following the Commissioning Date or (if earlier) until the Aggregate Discharge Throughput exceeds 2,750kWh per kWh of Nameplate Energy Capacity. The Actual Energy Retention Percentage shall be equal to or greater than the applicable “Minimum Energy Retention Percentage” below until the below periods have expired or (if earlier) the Aggregate Discharge Throughput exceeds the below “Aggregate Discharge Throughput Limitation”.

Period (Warranty Years following Commissioning Date)	Aggregate Discharge Throughput Limitation	Minimum Energy Retention Percentage
11	2,200	66%
12	2,350	62%
13	2,500	58%
14	2,600	54%
15	2,750	50%

Standard Test Conditions

When measuring the Actual Energy Retention Percentage, (i) the System shall be fully charged to 100% state of energy and then fully and continuously discharged at Nominal Power (as defined in the Specifications) to 0% state of energy, (ii) the ambient temperature at the System location and the initial temperature of all battery pods is 25°C ±5°C, and (iii) the initial temperature of all battery pods when the System starts both charging and discharging shall be 25°C ±5°C.

⁵ **Commissioning Date** means the earlier of (a) the date the System is commissioned or (b) the date falling 90 days after the Original Sale Date.

⁶ **Actual Energy Retention Percentage** means the energy discharged by the System as a whole (as measured at the AC output of the inverter(s)) at Standard Test Conditions, expressed as a percentage of the Nameplate Energy Capacity.

⁷ **Aggregate Discharge Throughput** means the aggregate discharge throughput of the System (at the inverter AC output) in kWh per kWh of Nameplate Energy Capacity.

⁸ **Warranty Year** means each consecutive 365 day period commencing on the Commissioning Date and each anniversary of the Commissioning Date.

⁹ **Nameplate Energy Capacity** means the kWh energy capacity of the System set out in the System purchase agreement.

Exhibit 2 - Energy Shortfall Damages

Circumstances where Payment of Energy Shortfall Damages is Permitted

Tesla may remedy any claims under Section 1(c) of this Limited Warranty by paying Energy Shortfall Damages unless (a) the Minimum Energy Retention Percentage for the Warranty Year in which the claim is made (as set out in Exhibit 1) exceeds the Actual Energy Retention Percentage at the time of the claim by more than 5 percentage points¹⁰ or (b) the amount of the Energy Shortfall Damages, when aggregated with any previous Energy Shortfall Damages paid by Tesla under this Limited Warranty, exceeds 5% of the System Price. If paragraph (a) or (b) above applies to a claim, Tesla must repair or replace the System or component under Section 3(a) or 3(b) of the Limited Warranty.

Calculation of Energy Shortfall Damages

1. The "Energy Shortfall Damages" payable in respect of a Limited Warranty claim shall be calculated as follows:

$$\left[\frac{[MERP (Warranty Year n) - AERP (Warranty Year n)] \times D}{\sum_1^n MERP (Warranty Year i) \times 365 \text{ days}} \right] \times \text{System Price}$$

where:

- n* = Number of Warranty Years elapsed since the Commissioning Date, rounded up to the nearest Warranty Year.
- MERP* = For any Warranty Year, the Minimum Energy Retention Percentage for that Warranty Year, as set out in Exhibit 1.
- AERP* = For any Warranty Year, the Actual Energy Retention Percentage (as defined in Exhibit 1) for that Warranty Year.
- D* = 365.

Example: The System Price was US\$1,000,000. In Warranty Year 4, the MERP is 83%, the AERP is 81%, and Tesla has never previously paid any Energy Shortfall Damages. Tesla may elect to pay Energy Shortfall Damages, and the amount of those Energy Shortfall Damages would be calculated as follows:

$$\frac{[83\% - 81\%] \times 365}{[95\% + 91\% + 88\% + 83\%] \times 365} \times \$1,000,000 = \$5,600$$

If the System was 2MWh, this \$5600 amount is equivalent to \$0.38 for each kWh of throughput that was "lost" in Contract Year 4 as a result of the AERP being lower than the MERP.

2. If Tesla elects to pay Energy Shortfall Damages in respect of more than one claim made by System owner in the same Warranty Year, then the Energy Shortfall Damages payable by Tesla in respect of the second (and each subsequent) claim shall be calculated as [the Energy Shortfall Damages payable by Tesla in respect of the second (or subsequent) claim] minus [the sum of all Energy Shortfall Damages paid by Tesla in respect of Limited Warranty claims made by System owner in the same Warranty Year].

Payment of Energy Shortfall Damages

Tesla shall pay any Energy Shortfall Damages to System owner within 30 days of its election to do so under Section 3 of this Limited Warranty, in the same currency as the System Price was denominated in the System purchase agreement.

¹⁰ This subsection refers to absolute values. For example, if the Minimum Energy Retention Percentage is 73%, then the Actual Energy Retention Percentage would have to be less than 68% in order for this subsection to apply.



Sales and Service Contract

Our business relationships with our customers shall be based on our General Terms and Conditions of Sale, as defined below:

1. **Turn Key Service:** Contractor is providing a “turn-key” system which includes all applicable standard hardware, materials, permits, panels, wiring, inverters, and inspection fees.
2. **Compliance to Building Codes:** All work shall be completed in a workmanship like manner and in compliance with all building codes and other applicable laws.
3. **License Status:** To the extent required by law all work shall be performed by individuals duly licensed and authorized by law to perform said work.
4. **Use of Subcontractors:** Contractor may at its discretion engage subcontractors to perform work hereunder, provided Contractor shall fully pay said subcontractor and in all instances remain responsible for the proper completion of this Contract.
5. **Liens and Waivers of Liens:** Contractor shall furnish Customer appropriate releases or waivers of lien for all work performed or materials provided at the time the next periodic payment shall be due. To protect Customer against liens being filed by Contractor, subcontractors and providers of materials, Contractor agrees that Final payment to Contractor shall be withheld by Customer until Contractor presents Customer with lien waivers, lien releases, or acknowledgment of full payment from each subcontractor and materials provider.
6. **Amendments or Changes to Scope of Work:** The Contractor and Customer recognize that due to unforeseen events, or to factors unknown to the Client or Contractor when the contract was made; Customer may desire a mid-job change in the specifications that would add time and cost to the specified work, possibly an inconvenience to the Contractor; or Other provisions of the contract may not be carried out due to unforeseen events beyond the control of the parties and may require adjustments to this contract. The parties shall make a good faith attempt to agree on all necessary particulars. Such agreements shall be put in writing and signed by the parties to this contract.
7. **Liability Waiver:** Contractor warrants it is adequately insured for injury to its employees and others incurring loss or injury as a result of the acts of Contractor or its employees and subcontractors.
8. **Permits and Approvals:** Contractor shall at its own expense obtain all permits necessary for the work to be performed.
9. **Taxes:** All applicable sales taxes included in quote price above.

10. Dispute Resolution: All disputes hereunder shall be resolved by binding arbitration in accordance with the rules of the American Arbitration Association.

11. Force Majeure: Contractor shall not be liable for any delay due to circumstances beyond its control including strikes, casualty or general unavailability of materials. Any starting or completion dates stated by us shall be subject to clarification of all technical details. Moreover, our obligation to meet any deadlines shall be based on the punctual and proper fulfillment of the customer's obligations. In the event of strikes, lockouts, Force Majeure, delayed shipments by suppliers or subcontractors or other causes hindering punctual Completion for reasons that we are not accountable for, we shall be entitled to extend the Completion date(s) by a reasonable amount of time."

12. Materials: All materials shall be new, in compliance with all applicable laws and codes, and shall be covered by a manufacturer's warranty if appropriate.

13. What Constitutes Completion: The work specified herein shall be considered completed upon approval by Customer, provided that Customer's approval shall not be unreasonably withheld. Except for the "retainage amount" of 10% of the contract price, substantial performance of the specified work in a workmanlike manner shall be considered sufficient grounds for Contractor to require final payment by Customer, except as provided in Liens and Waiver of Liens clause herein.

14. Limited Warranties: Contractor will complete the specified work in a substantial and workmanlike manner according to standard practices prevalent in Contractor's trade. The specified work will comply with all applicable building codes and regulations.

Contractor warrants that the labor provided as part of the specified work will be free from defects for a period of one (1) year from the date of completion.

Major equipment as supplied by third-party(ies) manufacturer(s) shall be warranted in accordance with manufacturer's warranty.

Contractor disclaims any liability for direct or indirect damages due to improper modifications, alterations or repair attempts, inappropriate use or operation, insufficient ventilation of electrical equipment, non-compliance with relevant safety standards or regulations, flood, lightning, over voltage, storm, fire (acts of nature).

Contractor will not be liable for any indirect or consequential damages, losses, costs or expenses however arising in contract or tort, including without restriction any economic losses of any kind, any loss or damage to property, any personal injury, any damage or injury arising from or as a result of misuse or abuse, or the incorrect operation of the equipment.

15. Right of Cancellation: Customer may cancel this Contract within three (3) days after signature by notifying Contractor of such in writing.

Make out all payments to “ProSolar Systems”

Checks can be mailed to:

ProSolar Systems
PO Box 15694
Tallahassee FL 32317

Returned Checks: Any returned payment will be assessed a \$50 returned check fee.

Credit Cards: Credit card payments are assessed a 4% handling fee.

Late Fee Policy: A late payment fee will be assessed if payment is received after the due date or if the payment received is less than the amount due. A late payment fee of \$10 or 5% of the overdue amount, whichever is greater, will be assessed monthly on past due balances of \$100.00 or more.

Other Terms: All agreements between Customer and Contractor related to the specified work are incorporated in this Contract. Any modification to the Contract shall be in writing.

I have read and agree to the above Sales Contract:

Customer : _____ (print name)

Signature _____

Date : ____/____/____

Contractor (ProSolar Systems, LLC : _____ (print name)

Signature _____

Date : ____/____/____