

## THE CHATEAU

## The ultimate solar & backup power system.

The Chateau Package is our largest solar and backup power option, designed to provide power for larger homes and cottages. Featuring a massively powerful 200A rated solar inverter and our PT14 battery, this system can be used for both off grid and grid tied residences. With built-in scalability, the Chateau Package can be customized with additional panels and batteries based on your needs.

#### Package components

Qty 1 - Sol-Ark 15K

Qty 1 - PT Battery 14

Qty 24 - 340W Canadian Solar Panels



PERFECT FOR LARGER HOMES AND COTTAGES



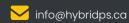
IDEAL FOR HOME APPLIANCES, ELECTRONICS, **PUMPS AND MORE!** 



ADD UP TO 44 PANELS TO THE SYSTEM TO MEET ALL YOUR POWER NEEDS

#### **Contact us**









#### **Key features**



#### Stackable

Parallel up to 9 Sol-Ark units and up to 24 PT14 batteries to expand your system.



#### Sensors

RSD / Emergency Stop, External CT Sensors, Parallel Comms / Battery Cooms, Auto Gen Start.



#### **Smart System**

Grid sell, off-grid, meter zero, time of use, & peak shaving.



#### **Battery Communication**

PT14 battery communicates with the Sol-Ark to ensure the best performance and energy monitoring.



#### **Smart Load**

Prioritize necessities & run luxuries with less.



#### **Gen Breaker**

Up to 48kW grid or generator input.



ATTENTION: Please note it is the customer's obligation to check local electrical requirements and certification requirements of all HPS purchased equipment to ensure they meet the local electrical code. Additional components such as AFCI protection, Conduit Caps, and fusing/breakers may be required.





## Sol-Ark 15K Specifications.

Solar Output Power	19,500W	Max Allowed PV Power	19,500W	
Max PV Power Delivered to Battery & AC Outputs	15,000W	Max DC Voltage	500V @ 26A	
MPPT Voltage Range	150-425V	Starting Voltage	125V	
Number of MPPT	3	Max Solar Strings per MPPT	2	
Max DC Current per MPPT (Self Limiting)	26A	Max AC Coupled Input (Micro/String Inverters)	19,200W	
AC Output Power	15kW On-Grid & Off-Grid	Connections	120/240/208V split phase	
Continuous AC Power With PV	15,000W 62.5A-L (240V)	Continuous AC Power From Batteries	12,000W 50A-L (240V)	
Total Harmonic Distortion (THD)	≤ 3%	Surge AC Power 10sec Surge AC Power 100ms	24,000VA L-L (240V) 30,000VA L-L (240V)	
Fault Current 5sec Fault Current 100ms	94A w/ PV   75A w/o PV 120A	Parallel Stacking	Yes - Up to 12	
Frequency	60/50Hz	Continuous AC Power With Grid or Generator	48,000W 200A L-L (240V) 24,000W 200A L-N (120V)	
CEC Efficiency	96.5% (Peak 97.5%)	Idle Consumption Typical— No Load	90W	
Sell Back Power Modes	Limited to Household/Fully Grid-Tied	Design (DC to AC)	Transformerless DC	
Response Time (Grid-Tied to Off-Grid)	5ms	Power Factor	+/- 0.9 - 1.0	
Dimensions	80.7cm x 46.4cm x 27.6cm [31.8in x 18.3in x 10.9in]	Weight	61.2 kg [135 lbs]	
Enclosure	IP65 / NEMA 3R	Ambient Temperature	-40°C to 60°C [-40°F to 140°F] Derating	
Wi-Fi & LAN Communication	Included	Installation Style	Wall-Mounted	

#### Standard Warranty (Verified by Halt Testing)

10 Years

#### Protection & Certifications

Electronics Certified Safety by SGS Labs to NEC & UL Specs - NEC 690.4B & NEC 705.4/6 Grid Sell Back — UL1741-2010/2018, IEEE1547a -2003/2014, FCC 15 Class B, UL1741SB, CA Rule 21, HECO Rule 14H







## **PT14 Battery Specifications.**

Chemistry	LiFePO4	Min Voltage	44V	
Nominal Voltage	51.2VDC	Max Voltage	56VDC	
Energy Capacity	14kWh	Operational Temperature	-30°C to 45°C [-22°F to 113°F]	
Battery Heating Operational Temperature	-30°C to 10°C [-22°F to 50°F]	Maximum Continuous Discharge Amperage	280A	
Maximum Continuous Charge Current	280 A (140 A recommended)	Weight	90.7 kg [200 lbs]	
Dimensions	39cm x 13.3cm x 61cm [15.5in x 13.3in x 24in]	Circuit Breaker Amperage	300A	
Enclosure Material	Aluminum	Communication	CANBUS	
Maximum Batteries in Parallel	24	Certifications (battery)	UL1973 (Pending) UN38.3 CSA (SPE-1000) Inspected UL9540A	

#### Cycles

6700 cycles

(charging CC/CV @0.5C & discharging CC @0.5C, 100% DOD, 25°C +/-2°C 80% of rated capacity), 8500 cycles

(charging CC/CV @0.5C & discharging CC @0.5C, 100% DOD,  $25^{\circ}$ C +/- $2^{\circ}$ C 70% of rated capacity), 10,000 cycles

(charging CC/CV @0.3C & discharging CC @0.3C, 70 DOD, 25°C +/-2°C 70% of rated capacity)

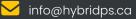
#### With

\*4 Caster Wheels

\*\* Temporary rope handles provided for installation

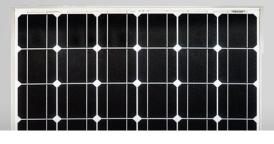


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## 340W Canadian Solar Panel Specifications.

Electrical Data   STC*				
Nominal Max. Power (Pmax)	340W			
Opt. Operating Voltage (Vmp)	37.9V			
Opt. Operating Current (Imp)	8.97A			
Open Circuit Voltage (Voc)	46.2V			
Module Efficiency	17.49%			
Operating Temperature	40°C to 85°C [-40°F to 185°F]			
Max. System Voltage	1500V (IEC) or 1500V (UL)			
Module Fire Performance	TYPE 1 (UL 1703) or CLASS C (IEC 61730)			
Max. Series Fuse Rating	15A			
Application Classification	Class A			
Power Tolerance	0 ~ + 5W			

Mechanical Data			
Cell Type Mono-crystalline, 6 inch			
Cell Arrangement	72 (6 x 12)		
Dimensions 196 cm x 99.2 cm x 4 cm   [77.2in x 39.1in x 1.57in]			
<b>Weight</b> 22.4 kg (49.4 lbs)			
Front Cover	3.2 mm tempered glass		
Frame Material	Anodized aluminium alloy		
J-Box	IP67, 3 diodes		
Cable	PV1500DC-F1 4 mm2 (IEC) & 12 AWG 2000 V (UL), 1160 mm (45.7 in)		
Connector	T4 series or PV2 series		

#### **Temperature Characteristics**

Temperature Coefficient (Pmax)	-0.41 % / °C/F
Temperature Coefficient (Voc)	-0.31 % / °C/F
Temperature Coefficient (Isc)	0.053 % / °C/F
Nominal Operating Cell Temperature	45±2 °C/F

#### **Performance At Low Irradiance**

Outstanding performance at low irradiance, average relative efficiency of 96.5 % from an irradiance of 1000 W/ m2 to 200 W/m2 (AM 1.5, 25°C).

The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to on-going innovation, research and product enhancement, Canadian Solar Inc. reserves the right to make any adjustment

to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

Caution: For professional use only. The installation and handling of PV modules requires professional skills and should only be performed by qualified professionals. Please read the safety and installation instructions before using the modules.

 $^{*}$  Under Standard Test Conditions (STC) of irradiance of 1000 W/m2, spectrum AM 1.5 and cell temperature of 25°C.

#### **Electrical Data | NOCT\***

Nominal Max. Power (Pmax)	245W
Opt. Operating Voltage (Vmp)	34.6V
Opt. Operating Current (Imp)	7.10A
Open Circuit Voltage (Voc)	42.4V
Short Circuit Current (Isc)	7.67A

 $\ast$  Under Nominal Operating Cell Temperature (NOCT), irradiance of 800 W/ m2, spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

Contact us

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# Compare our solar & backup power packages



	Backu	p Power	[	— Grid Tied ———	— Off Grid ———	
	Frontier	Defender	Starter	Cottager	Chateau	Ranger
Power	6,000W	6,000W	12,000W	12,000W	15,000W	6,000W
Surge Power	18,000W	18,000W	25,000W	25,000W	30,000W	18,000W
Output Voltage	120VAC	120VAC	120 - 208 - 240V AC	120 - 208 - 240V AC	120 - 208 - 240V AC	120VAC
Solar Charging Power	3,500W	3,500W	12,000W	12,000W	15,000W	3,500W
Outdoor Rated	No	No	Yes (Inverter only)	Yes (Inverter only)	Yes (Inverter only)	No
Temperature Rating	-30°C to 45 °C [-22°F to 113 °F]					
Total Energy	5kWh	14kWh	-	14kWh	14kWh	14kWh
Number of Solar Panels	-	-	9	12	24	8
Included Solar Panel Power	_	-	3,060W	4,080W	8,160W	2,720W
Package Components	(1) Power Tower (1) PT5 Battery	(1) Power Tower (1) PT14 Battery	(1) Solark 12K (9) 340W Ca- nadian Solar Panel	(1) Solark 12K (1) PT14 Battery (12) 340W Canadian Solar Panel	(1) Solark 15K (1) PT14 Battery (24) 340W Canadian Solar Panel	(1) Power Tower (1) PT14 Battery (8) 340W Ca- nadian Solar Panel
Perfect For		$\sim$	<b>A</b> - <b>A</b>	<b>A</b> - <b>A</b>	<b>~</b> -	. 11
*Based on Canadian figures **Can be scaled to a maximum of 1,440kWh	Back up power for 10 – 50 hours		Avg. Monthly Energy Usage: 367kWh* ** Base package will offset some energy costs and can be scaled to offset full energy costs.	Avg. Monthly Energy Usage: 490kWh* ** Base package will power all electrical appliances and devices with the exception of electric heat/air conditioning.	Avg. Monthly Energy Usage: 980kWh* ** Base package will power all electric appliances and devices with limited load management. Includes air conditioning for grid- tied, excludes electric	Avg. Monthly Energy Usage: 326kWh* Will power most small appliances and electrical basics.



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51

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heating for off-grid.