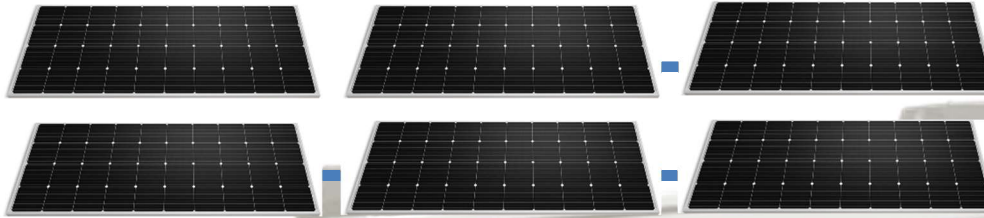


RRA22AC12
12V A/C



Jayco
OVERLANDER^{EXT}
SOLAR POWER MANAGEMENT SYSTEM

RSP200D-G1
6-200W Hard Solar Panel



RNG-CNCT-FUSE30
30A Inline Fuse

RNG-CNCT-FUSE30
30A Inline Fuse

RMS-LFS
600A Battery
Monitor



RNG-DCC1212-20
DC to DC Battery
Charger



RNG-CTRL-RVR100
100A Rover MPPT
Charge Controller



PT07201213
600AH Battery Box
PT07201215
Lid for PT07201213

**600AH
Battery Box**



SL3000-112
3000W Inverter Charger
50A Bypass each leg



RBT100LFP12SH
6-12V 100AH Lithium Batt.
7.2kWh Stored Power

JAYCO SOLAR INFORMATION GUIDE

**6-200 Watts Solar Panels
= 1200 Watts**



Sunny Summer Day – 90% efficiency

1200W x 0.9 = 1080W of Solar Output
6hrs x 1080W = **6480 watts per day**

Sunny Winter Day – 70% efficiency

1200W x 0.7 = 840W of Solar Output
3hrs x 280W = **2520 watts per day**

Cloudy Summer Day – 30% efficiency

1200W x 0.3 = 360W of Solar Output
6hrs x 120W = **2160 watts per day**

Cloudy Winter Day – 10% efficiency

1200W x 0.1 = 120W of Solar Output
3hrs x 40W = **360 watts per day**

Battery Bank

600AH x 12 Volts
= **7200 Watts of
Stored Power**



**7200W x 85% (15% reserve)
= 6120 watts of useable power**



This Solar package also gives the customer the ability to add on if desired. For example, if the customer doubles the battery bank, then it will double the run times. Same goes with solar, increasing the solar within component capacities will increase the solar production.

Appliances – Power Usage and Runtimes based on full battery (6120W battery power divided by appliance watts/hour)

120-volt Air Conditioner	= 1600W	= 3.82 hrs
12-volt DC Air Conditioner	= 1000W	= 6.12 hrs
Cooktop	= 1500W	= 4.08 hrs
Fireplace	= 1600W	= 3.82 hrs
Microwave	= 1100W	= 5.56 hrs
Water Heater	= 1600W	= 3.82 hrs
Refrigerator	= 80W	= 76.5 hrs
Lights, Water Pump, Misc.	= 40W	= 153 hrs



LITHIUM-IRON PHOSPHATE BATTERY

12 VOLT 100AH SELF-HEATED

RBT100LFP12SH

- Next-level BMS w/ communication ports for auto-balance and auto-storage mode
- Powerful and compact at only 29 lb
- Superior 4000+ cycles at 80% depth of discharge

100AH 12V LITHIUM IRON PHOSPHATE BATTERY

Operating Temperature	-20~50°C
Cycle Life	4000 cycles at 80% DOD
Communication Port	RS485
Weight	28.6 lb
Dimensions	11.4 × 6.8 × 7.4 in

*Pre-wired in 600AH Battery Box

600A BATTERY MONITOR

RMS-LFS



KEY FEATURES

Plug and Play

- Simply connects the monitoring screen to the battery bank using an RJ45 communication cable for real-time monitoring.

Accurate Readings

- Obtains battery bank status directly from the battery management system for precise tracking and prediction.

Comprehensive Protection

- Displays straightforward warning codes for the quick recognition of potential abnormal conditions and improper operation.

Easy Operation

- Shows detailed battery bank information at the push of a button without the need of system configuration and calibration.



ELECTRICAL SPECIFICATIONS	MECHANICAL SPECIFICATIONS
Supply Voltage: 12VDC	Communication Port: RJ45 (RS485 Protocol)
Supply Current: 30mA	Display: Backlit LCD
Power Consumption: <1W	User Interface: 2 Front Panel Menu Buttons, 1 Power Button
Operating Temperature Range: -4°F~113°F / -20°C~45°C	Mounting System: Wall Mount
Voltage Accuracy: ±0.1V	Dimension: 2.76 x 4.33 x 1.25 inch / 70 x 110 x 31.8 mm
Current Accuracy: ±0.1A	Weight: 0.14 lbs / 62 g



3000W 12V PURE SINE WAVE INVERTER CHARGER W/ 50A BYPASS SL3000-112

SL-3000 Features

- All in one design: Bi-direction inverter and charger
- 4 stage charging function with Max. 125A
- Up to 12KW AC bypass capability (thru 2 legs , 50 Amp each)
- Intelligent software for power management: Power sharing and generator function
- Fan controls by load and temperature
- -20°C~40°C full load operation without derating
- UL458 with marine supplement , CSA 22.2 , FCC approved
- Compact design (3000W @ 22.6 kg)
- Remote controller CR-20 Standard



200-WATT 12 VOLT MONOCRYSTALLINE SOLAR PANEL RSP200D-G1

Electrical Data

Maximum Power at STC*	200 W
Optimum Operating Voltage (V_{mp})	21.0 V
Optimum Operating Current (I_{mp})	9.52 A
Open Circuit Voltage (V_{oc})	24.1 V
Short Circuit Current (I_{sc})	10.9 A
Cell Efficiency	21.0%
Maximum System Voltage	1000 VDC UL
Maximum Series Fuse Rating	15 A

Thermal Characteristics

Operating Module Temperature	-40°C to +80°C
Nominal Operating Cell Temperature (NOCT)	47±2°C
Temperature Coefficient of Pmax	-0.42%/°C
Temperature Coefficient of Voc	-0.31%/°C
Temperature Coefficient of Isc	0.05%/°C

Mechanical Data

Solar Cell Type	Monocrystalline (156 x 156 mm)
Number of Cells	40 (4 x 10)
Dimensions	1620 x 657 x 35 mm
Weight	11.5 kg
Front Glass	Tempered Glass 0.13 in (3.2 mm)
Frame	Anodized Aluminium Alloy
Connectors	Solar Connectors
Fire Rating	Class C

Solar Connectors

Rated Current	30A
Maximum Voltage	1000VDC
Maximum AWG Size Range	10 AWG
Temperature Range	-40°F to 194°F
IP Rating	IP 67



Rover 100 Amp MPPT Solar Charge Controller

RNG-CTRL-RVR100



ROVER 100 AMP MPPT SOLAR CHARGE CONTROLLER

Nominal Voltage: 12V/24V/36V/48V Auto Recognition

Rated Charge Current: 100A

Max. PV Input Power: 1300W/12V; 2600W/24V; 3900W/36V;
5200W/48V

Max. PV Input Voltage: 150VDC (25°C), 140VDC (-25°C)

Self-Consumption: 2.7W - 2.9W

Operating Temperature: -35°C to +45°C

Temperature Compensation: -3mV/°C/2V (default)

Dimensions: 12.00 x 17.44 x 4.35 in

Weight: 22 lb.

Enclosure: IP32

Terminals: 25mm², 4AWG

DC to DC Battery Charger

RNG-DCC1212-20



RENOGY 20A DC TO DC BATTERY CHARGER
Nominal Voltage: 12V
Rated Charge Current: 20A
Output: 250W
Idle Power Consumption: <0.4A
Input Voltage Range: 8V-16V
Equalization Voltage: N/A
Float Voltage: 13.2-13.8v
Boost Voltage: 14.1-14.7v
Operating Temperature: -20°C to +50°C
Dimensions: 8.31 x 6.89 x 2.68 inches
Weight: 2.93lbs

KEY FEATURES

- Multi-Chemistry Battery Types: AGM, Flooded, Gel, and Lithium
- Smart Protection Features: Over-voltage safety, Overheat protection, and Reverse polarity protection
- Battery Input and Output Isolation
- 3-phase Charging: Bulk, Boost, and Float
- Compact, sturdy design, built tough for all conditions
- Increases run time of loads, such as fridges and lights
- Overcomes voltage drop caused by long cable runs
- Prolongs Battery Life





TURBOAIR2

12-VOLT RV A/C

12VDC Air Conditioner

RRA22AC12

BTU Rating: 13.5K BTU

CFM Rating: 285

Fans: Dual 9" Spal pullers

Coils: Parallel low all aluminum condenser,
Copper Tube and Corrugated Aluminum Fin

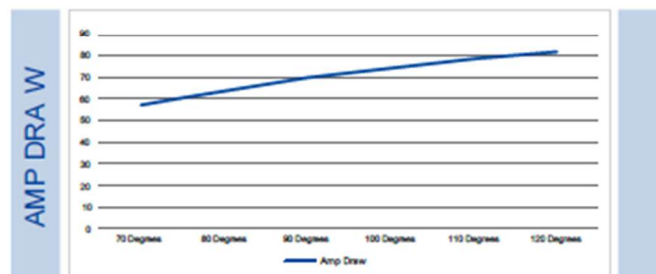
Evaporator

Amp draw: 35% less amp draw than any other
system on the market

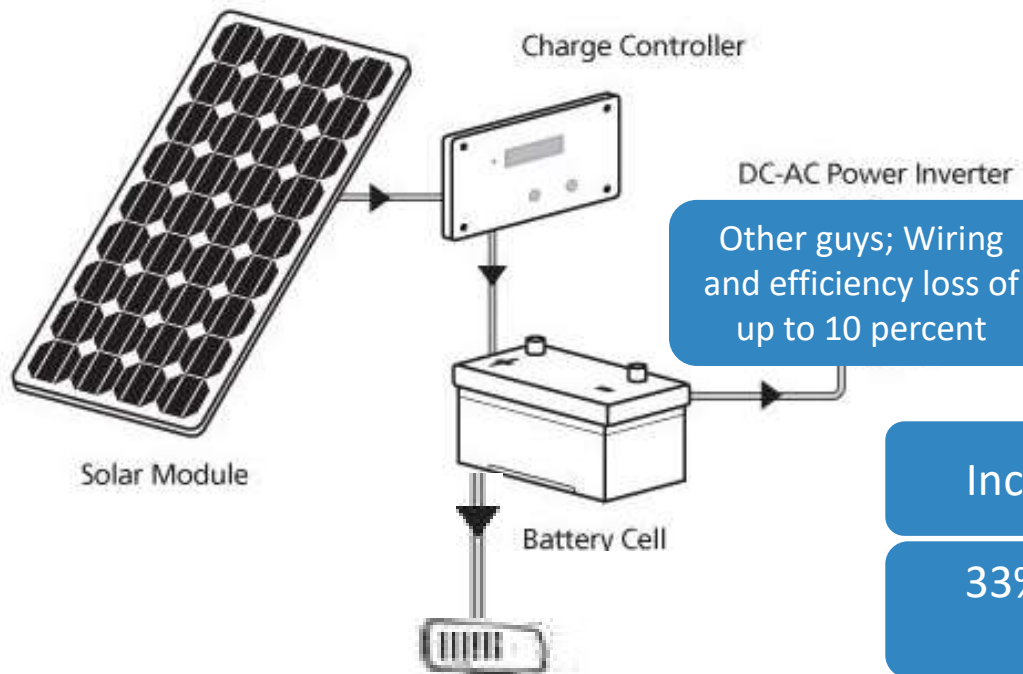
Noise level: Ultra-quiet operation

Complete dimensions: 8-1/2" Tall, 47" Long,
34" Wide

Weight: 90 pounds



DC Air Conditioning



Increases efficiency by bypassing inverter

33% reduction in energy necessary for air conditioner

12v DC Air Conditioner

DC is the form power created by the solar panel. Most companies invert the power to 120V AC and lose efficiency through that process. Jayco uses a DC Air conditioner to eliminate this loss of efficiency and simplify the power supply for a Greener and higher quality system.



SOLAR EXPENSES – RECEIPT

The proposed Receipt would be shipped and attached to the back of a cabinet door for the customer to use in order to aid them in receiving the Federal Solar Tax Credit. An example is shown below.

Company Name Address		Receipt Number Date
Unit Number: <u>xxxxx</u> Customer Name: <u>xxxxxxx</u>		
Installation Fees	\$280	
Electrician Fees	\$125	
Engineer Fees	\$125	
Assembly Fees	\$200	
Inspection Costs	\$50	
Wiring	\$300	
Invertors	\$800	
Mounting Equipment	\$145	
Solar Panels	\$1300	
Batteries	\$3500	
Sales Tax	Varies By State	
Total Solar Cost: <u> \$6825 </u>		

FEDERAL SOLAR TAX CREDIT FORM

Form 5695		Residential Energy Credits		OMB No. 1545-0074	
Department of the Treasury Internal Revenue Service		Go to www.irs.gov/Form5695 for instructions and the latest information. Attach to Form 1040, 1040-SR, or 1040-NR.		Attachment Sequence No. 158	
Name(s) shown on return		Your social security number			
Part I Residential Energy Efficient Property Credit (See instructions before completing this part.)					
Note: Skip lines 1 through 11 if you only have a credit carryforward from 2019.					
1	Qualified solar electric property costs	1			
2	Qualified solar water heating property costs	2			
3	Qualified small wind energy property costs	3			
4	Qualified geothermal heat pump property costs	4			
5	Add lines 1 through 4	5			
6	Multiply line 5 by 26% (0.26)	6			
7a	Qualified fuel cell property. Was qualified fuel cell property installed on, or in connection with, your main home located in the United States? (See instructions.)	7a	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Caution: If you checked the "No" box, you cannot take a credit for qualified fuel cell property. Skip lines 7b through 11.					
b Print the complete address of the main home where you installed the fuel cell property.					
Number and street Unit No.					
City, State, and ZIP code					
8	Qualified fuel cell property costs	8			
9	Multiply line 8 by 26% (0.26)	9			
10	Kilowatt capacity of property on line 8 above	10			
11	Enter the smaller of line 9 or line 10	11			
12	Credit carryforward from 2019. Enter the amount, if any, from your 2019 Form 5695, line 16	12			
13	Add lines 6, 11, and 12	13			
14	Limitation based on tax liability. Enter the amount from the Residential Energy Efficient Property Credit Limit Worksheet (see instructions)	14			
15	Residential energy efficient property credit. Enter the smaller of line 13 or line 14. Also include this amount on Schedule 3 (Form 1040), line 5	15			
16	Credit carryforward to 2021. If line 15 is less than line 13, subtract line 15 from line 13	16			

For Paperwork Reduction Act Notice, see your tax return instructions.

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Form **5695** (2020)

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Part II Nonbusiness Energy Property Credit

17a	Were the qualified energy efficiency improvements or residential energy property costs for your main home located in the United States? (see instructions)	17a	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Caution: If you checked the "No" box, you cannot claim the nonbusiness energy property credit. Do not complete Part II.			
b Print the complete address of the main home where you made the qualifying improvements.			
Caution: You can only have one main home at a time.			
Number and street Unit No.			
City, State, and ZIP code			
c	Were any of these improvements related to the construction of this main home?	17c	<input type="checkbox"/> Yes <input type="checkbox"/> No
Caution: If you checked the "Yes" box, you can only claim the nonbusiness energy property credit for qualifying improvements that were not related to the construction of the home. Do not include expenses related to the construction of your main home, even if the improvements were made after you moved into the home.			
18	Lifetime limitation. Enter the amount from the Lifetime Limitation Worksheet (see instructions)	18	
19	Qualified energy efficiency improvements (original use must begin with you and the component must reasonably be expected to last for at least 5 years; do not include labor costs) (see instructions).		
a	Insulation material or system specifically and primarily designed to reduce heat loss or gain of your home that meets the prescriptive criteria established by the 2009 IECC	19a	
b	Exterior doors that meet or exceed the version 6.0 Energy Star program requirements	19b	
c	Metal or asphalt roof that meets or exceeds the Energy Star program requirements and has appropriate pigmented coatings or cooling granules which are specifically and primarily designed to reduce the heat gain of your home	19c	
d	Exterior windows and skylights that meet or exceed the version 6.0 Energy Star program requirements	19d	
e	Maximum amount of cost on which the credit can be figured	19e	\$2,000
f	If you claimed window expenses on your Form 5695 prior to 2020, enter the amount from the Window Expense Worksheet (see instructions); otherwise enter -0-	19f	
g	Subtract line 19f from line 19e. If zero or less, enter -0-	19g	
h	Enter the smaller of line 19d or line 19g	19h	
20	Add lines 19a, 19b, 19c, and 19h	20	
21	Multiply line 20 by 10% (0.10)	21	
22	Residential energy property costs (must be placed in service by you; include labor costs for onsite preparation, assembly, and original installation) (see instructions).		
a	Energy-efficient building property. Do not enter more than \$300	22a	
b	Qualified natural gas, propane, or oil furnace or hot water boiler. Do not enter more than \$150	22b	
c	Advanced main air circulating fan used in a natural gas, propane, or oil furnace. Do not enter more than \$50	22c	
23	Add lines 22a through 22c	23	
24	Add lines 21 and 23	24	
25	Maximum credit amount. (If you jointly occupied the home, see instructions)	25	\$500
26	Enter the amount, if any, from line 18	26	
27	Subtract line 26 from line 25. If zero or less, stop; you cannot take the nonbusiness energy property credit	27	
28	Enter the smaller of line 24 or line 27	28	
29	Limitation based on tax liability. Enter the amount from the Nonbusiness Energy Property Credit Limit Worksheet (see instructions)	29	
30	Nonbusiness energy property credit. Enter the smaller of line 28 or line 29. Also include this amount on Schedule 3 (Form 1040), line 5	30	

Form **5695** (2020)