

SOLAR 2000

TAKE CHARGE OF HOW YOU CAMP

WHAT IS SOLAR FOR RV's

Typical System Components:

- Solar Panel
 - Uses sunlight to generate DC current
- Solar Roof Port
 - Rooftop receptacle allows the solar panel to be plugged in
- Solar Charge Controller
 - Converts & manages DC energy collected by the Solar Panel into usable DC energy for the battery.
 - 2 Types PWM & MPPT
 - <u>PWM</u> or Pulse Width Modulation
 - Good low-cost solution for small systems
 - <u>MPPT</u> or Maximum Power Point Tracking
 - Will harvest more energy from the solar array, 10-40% more efficient
- Inverter
 - Converts 12 VDC (Battery) power into 110 VAC (Shore) power
 - Typically sized in Watts







Isc/A

6.55

KEYSTONE

Inverted 110v loop prep with up to 7 outlets (inverter not included)

Zamp Solar portable solar charge port

Batteries not included

SF200 – SOLARFLEX[™] 200W

SF200 Components:

- 30A solar roof port w/ MC4 connectors & 10 AWG MPPT solar charging circuit
- Future Solutions 200-watt solar panel
- <u>15A Victron SmartSolar MPPT controller</u> w/ Bluetooth app
- Inverted 110v loop prep with up to 7 outlets (inverter not included)
- <u>Zamp Solar</u> portable solar charge port
- Batteries not included



Door Sticker with QR Code

• Easily identifies included system

Prepped for Inverter Install

- New Inverted Circuit Label
 - Label identifies inverter prepped circuits in the RV

Monitor Solar Energy Collection

• Utilize the Victron Connect Bluetooth app to monitor real-time solar energy collection

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	STATUS	HISTORY	TRENDS
0			Ø
	(425w	
			36.00V
0	Current		11.8A
			28.30V
0	Current		15.00A
			Bulk
			On
	Current		3.5A

SOLARFLEXTM SF200



SOLARFLEX[™] 200

Protect your battery investment and keep voltagesensitive components operating efficiently with 200watts of solar on the roof. Designed with the owner in mind, SolarFlex 200 is a versatile base system that can be easily expanded to fit many different energy needs.



WHAT YOU CAN EXPECT

Keystone's SolarFlex[™] 200 base system will maintain and refill your RV's battery so that you can operate 12V systems with less fear of depleting and having to replace your battery. This allows you to more confidently operate components like water pumps, slides, stabilizers, leveling, some refrigerators, lights, and iN-Command when you're not connected to shore power.

The Smart Solar Charge Controller will quickly refill batteries with energy from the sun so you don't end up with dead batteries. It even prevents overcharging. SolarFlex[™] 200 also includes a smartphone app that allows you to see your charging state and make smart choices about power usage.



EXPANSION OPTIONS

SolarFlex 200 is designed to be easily customized at the dealership before you take delivery of your RV or as your solar energy needs change. Components purchased and installed through an authorized Keystone dealer are under full warranty.

ADD SOLAR ENERGY COLLECTION* Install a second Future Solutions 200w roof panel Add Zamp portable solar charging panels to the prewired port

ADD SOLAR ENERGY COLLECTION* + FASTER CHARGING

Install a **second 200w Future Solutions panel** and upgrade from a 15A solar charge controller to a **30Amp solar charge controller** Upgrade 200-watt panel(s) with **two 300w Future Solutions panels** and upgrade from a 15A solar charge controller to a **30Amp solar charge controller**

ADD SOLAR POWER FOR 110V OUTLETS

Install 2000w inverter in inverted prep circuit (Xantrex or Magnum recommended)

REAL-TIME BATTERY LIFE MONITORING

Install Victron Smart Shunt Battery Monitor 500A/50mV. *SolarFlex supports a maximum of two panels per roof port.



SOLAR/ENERGY 101



SOLARFLEX[™] - Best In Class

- Parallel Solar Panel Arrays
- Flexible Systems allow easy upgrades
 - Components purchased and installed through an authorized Keystone dealer are under full warranty
- Most Solar Installations require 200 Ah battery bank minimum to store enough energy to realize the benefits of Solar



Lithium Batteries

- Lithium Battery Banks Compliment Solar Energy very well
- Faster charging up to 5x quicker to recharge
- Typically work with most converters including WFCO & Progressive Dynamics
- Continuous Discharge can be discharged far deeper than lead acid without damage



Battery Bank/Capacity Information

- Amp Hours (Ah)
 - Unit of electric charge; one amp of current flowing for one hour
- <u>Reserve Capacity (RC)</u>
 - Number of minutes a battery can maintain a useful voltage under a 25 Amp discharge
- Conversion from RC to Ah
 - Ah = RC/2.4

SOLARFLEX™ 400i

Always Remember – Solar will not "Power" the RV, Solar adds energy to the battery bank to replenish energy expelled. The battery bank must be large enough to store energy harvested by the solar system to be used for power in the RV.













	SOLAR 200	SOLAR 4001	SOLAR 600i-L	50 HAR 1200i-L
Roof ports	1 - 30A	2 - 30A	2 - 30A	2 - 30A
Solar panels	1 - 200w	2 - 200w	2 - 300w	4 - 300w
SMART battery controller w/ bluetooth	15A	30A	50A	2 - 50A
Battery monitoring system w/ bluetooth	NO	YES	YES	YES
Smartphone connection	Bluetooth	Bluetooth	Bluetooth & Internet	Bluetooth & Internet
Inverter w/ built-in transfer switch	N/A	2000w	3000w	3000w, Dual In & Out
Inverted circuits	1 Prep	1 Prep, 1 Active	2 Active	2 Active
Batteries	NO	NO	1 - LiFePO4	2 - LiFePO4



