# 2017 RV Solar Catalogue



Distributor of Renewable Energy Products

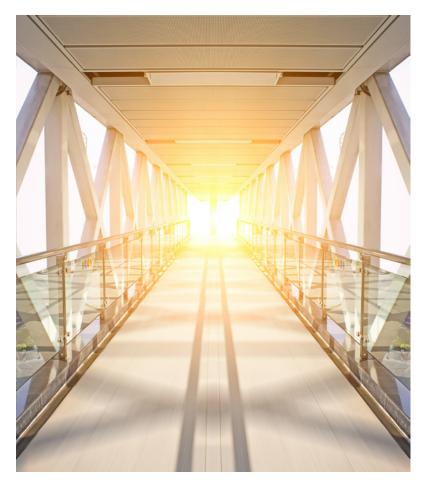


www.switchenergy.ca



# **Switch Energy Today!**

A New Approach



At Switch Energy, we strive to provide the best products available in the industry. We are continually researching new products to discover new and innovative ways to provide our customers with the best power solutions.

If we told you we could increase your solar panels efficiency by up to 30% just by adding one low cost component, would you be interested? Read all about MPPT technology and judge for yourself.

Whether you are heading down the road less travelled or off to your favourite vacation spot, we will get you there safely and securely with the latest solar technology from Switch Energy.



# **Switch Energy RV Solar Kits**

Solar kits are virtually maintenance free and are designed to give you years of uninterrupted power.



#### **The Highway Companion**

Switch Energy MPPT 187 Watt Equivalent Kit - #RV8101

- Switch Energy 160 Watt Solar Panel
- Switch Energy 40Amp MPPT Controller
- SRNE SR-MT2440 12/24
- Switch Energy Remote Display SRNE SR-RM50 amp Fuse and holder
- MC4 RV cable kit 25 ft Red and 25 ft Black with 2 ends
- Switch Energy Z bracket Kit



Security Day & Night



#### The Weekend Getaway

Switch Energy 160 Kit - #RV8107

- Switch Energy 160 Watt Solar Panel
- Enerwatt EWC-30 amp Charge controller 12 volt
- MC4 RV cable kit 25 ft Red and 25 ft Black with 2 ends
- Switch Energy Z bracket kit



**Broaden Your Horizons** 



#### The Horizon Expander

Switch Energy MPPT 300 Watt Equivalent Expansion Kit - #RV8105

- Canadian Solar 270 Watt Solar Panel Black framed
- MC4 RV cable joiner pair (two into one Y adapters)
- Switch Energy Z bracket Kit





## **Switch Energy RV Solar Kits**

These kits keep your batteries charged giving you the freedom to use lights, heaters, and other DC appliances at your convenience.



#### The Double Lane

Switch Energy 320 for Dual Batteries - # RV8109

- Switch Energy 160 Watt Solar Panel
- Morningstar Sunsaver Duo with remote display
- MC4 RV cable joiner pair (two into one Y adapters)
- MC4 RV cable kit 25 ft Red and 25 ft Black with 2 ends
- Switch Energy Z bracket Kit



#### The Voyager

- Switch Energy 100 Kit #RV8104
- Switch Energy 100 Watt Solar Panel 12 volt module
- Enerwatt EWC-30 amp Charge controller 12 volt
- MC4 RV cable kit 25 ft Red and 25 ft Black with 2 ends
- Switch Energy Z bracket Kit

### **The Magnum Series**



#### The Magnum II

Magnum MS2012 Kit - #RV8114

- Magnum Energy ME-BMK Battery monitor Kit
- 2/0 Gauge jumper 12 in
- Deltec PFB300T T-FUSE 300A
- Magnum Energy MS 2012 Pure Sine
- Magnum Energy ME-ARC50 Advance Remote Control



#### The Magnum III

Magnum MS2812 Kit - #RV8115

- Magnum Energy ME-BMK Battery monitor Kit
- 2/0 Gauge jumper 12 in
- Deltec PFB300T T-FUSE 300A
- Magnum Energy MS 2812 Pure Sine
- Magnum Energy ME-ARC50 Advance Remote Control



# The Freedom of Power

Switch Energy kits are designed to keep your batteries charged which will give you the freedom to use lights, furnaces, and other DC appliances without the worry of running out of power.



### What is MPPT & what are the Benefits?

#### MAXIMUM POWER POINT TRACKING

The MPPT charge controller increases charge current by harnessing more power from the sun. A conventional charge controller connects the solar panel to the battery and then regulates the amount of power a solar panel can deliver to the battery.

MPPT technology operates the solar panel at its optimum voltage where it can produce the greatest amount of power. The greater amount of power harnessed from the solar panel is then provided to the battery as increased charge current.

The actual charge current increase you will see varies primarily with panel temperature and battery voltage. In comfortable temperatures, the power increase typically varies between 10 to25%, with 30% or more easily achieved with a discharged battery and cooler temperatures.

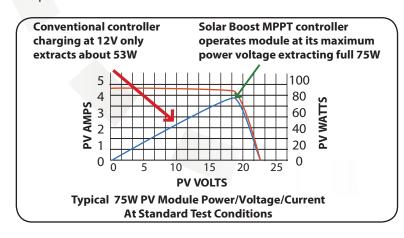
The MPPT charge controller we use also has temperature compensation to properly adjust the voltage for the batteries. This increases battery life and charging efficiency

#### **Be Cost Effective With MPPT**

Using MPPT will save you money by gaining up to 30% more power from your solar panels.

For example: If you take a 140 watt solar panel with a standard regulator, you will typically get between 100 to 110 watts depending on the battery voltage.

The same 140 watt panel with a MPPT charge controller, will capture and utilize the missing power, giving you the maximum efficiency of your panel and the best ratio of dollars per watt.



Why would you pay for a 140 watt panel and settle for only 100 watts of power?

It just doesn't make sense! The increased wattage more than off sets the additional cost of the MPPT charge controller.

Portability Matters



Portable 12 Volt Flexible Panels



Portable 12 Volt Folding Panel Kit



#### Kit comes complete with:

- Aluminum Carrying Case
- Telescopic Adjustable Legs
- Smart PWM Controller
- Battery Clamp & Ring Terminal
- Carry Handle & Locking Fasteners
- Vehicle electrical power connections
   Available in 90 (2 x 45) & 130 (2 x 65) watts.

### Remote Control

The Magnum Energy Remote is designed to be simple to use while offering full menu features for set-up and control. It offers multiple functions in one place, including: inverter on/off, charger on/off, shore power breaker settings, AGS control, meter button, setup, and technical menus.

#### Adjustable settings include:

- Shore power input from 5 to 60 amps
- AGS settings for voltage, temperature, quiet time, clock and status
- Inverter and charger settings for search watts, battery bank size, battery type, charge rate,
- VAC dropout, contrast, and power saver
- Tech settings for battery temperature, transformer
   and internal FETs, software revisions, and factory reset.
- A standard 50ft wire allows for plenty of room to display the remote with ease.



### **Automatic Generator Start**

Magnum Energy's Automatic Generator Start (AGS) controllers allow your generator to automatically start based on low batteryvoltage, state of charge, and/or high temperature when used with a ME-BMK and Remote Control (ME-ARC). ME-BMK is required for SOC.

#### Two models are available:

- The stand alone version of the AGS (ME-AGS-S) works well for installation and operation without an inverter
- The network version of the AGS (ME-AGS-N) allows operation of the AGS via the ME-RC or ME-ARC

#### **ME-AGS-N Features:**

- All settings are adjustable from the ME-RC or the ME-ARC remote
- Auto start is locked out when utility power is present
- Portable generator mode
- The AGS accommodates 12, 24 and 48 volt settings

CEN AND POWER I/O
1 2 3 4 5 6 7 8

NETWORK REMOTE

Onote

Manual start and stop: Auto Gen Start settings

**AUTO GENERATOR START** 

**Manual start and stop:** Auto Gen Start settings do not interfere with the manual start/stop operation of the generator. Just use any existing start/stop switch for your generator.

### **Parts and Accessories**

#### **Solar Panels**

SL40, SL90, SL140 watt panels Switch Energy 100, 160 watt panels Canadian Solar 270 watt panels

#### Folding Solar Panels with Carrying Case

90 watt 2 x 45 & 130 watt 2 x 65

#### **Solar Charge Controllers**

Blue Sky 2512iX 12V only 25 amp Blue Sky 3024iL 12/24V 40 amp

TriStar TS45 TS45MPPT

TriStar TS60 TS60MPPT

Morningstar regulator SS-10L-12V 10 amp Morningstar regulator SS-20L-12V 20 amp

#### **Charge Controllers with Display**

Enerwatt EWC-30 The SunSaver Duo Blue Sky SB2000E MPPT Blue Sky Sun Charger 30 amp Battery System Monitors

#### **Lota Chargers**

DLS-30, DLS -45, DLS-55 & DLS-75 IQ4 Smart Charger Module

#### **The Blue Sky System Monitor**

The Blue Sky System Monitor The TriMetric 2025-A BMK from Magnum Energy Smart Battery Combiner, 25 amp

#### **T Fuses**

200, 300, and 400 amp fuses are available

#### Automatic Transfer Relays

30 amp & 50 amp

#### **Magnum Inverters**

MMS1012, MMS1012-G, MS2012 & MS2812

#### **Kisae Inverters**

SWXFR 1210, 1220, 1230, IC121040, 122055. 1230150

#### **Magnum Accessories**

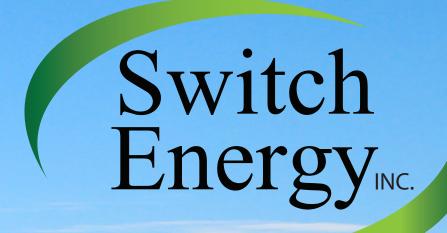
AGS-N Auto Gen Start-network AGS-S Auto Gen Start-stand alone ME-CB Cable Box

#### **Panel Mount Kits**

Switch Energy Z Bracket Kit V-RACK Tilting Panel Rack

#### **Morningstar Inverter**

SureSine 300



# **How To Size Your System**

Why should you install a solar charging system? A solar system will give you the freedom to camp anywhere without having to give up the comforts of home. Whether you need power for battery maintenance only, or for fulltime RV living, we have the system to suit your needs.

12 Volt Appliance	DC Watts	x Quantity	x Hours/Day	= Total Watt Hours/day
Incandescent Lights 18	18			
Fluorescent Lights 24	24			
Water Pump 48	48			
12 Volt T.V. 36	36			
Furnace 96	96			
12 Volt Stereo 9.6	9.6			
Gas Detector 2.4 1 24 58	2.4	1	24	58
120 VAC Appliance				
T.V.	60			
VCR/DVD	48			
Satellite Dish	1200	1	0.1	120
Microwave	1200	1	0.1	120
Toaster	720	1	0.1	120
Coffee Maker	144			
Blender 144	300			
Computer 300	60			
<b>Lap Top</b>				
Total Watt Hours/Day				