

# SURGE GUARD\* RV POWER PROTECTION

**Protect What You Value Most** 



## Complete Power Protection



### Your RV is at the Mercy of the Power Pedestal!

Poor power quality entering your RV can not only affect the longevity of your electronic equipment and motors, but can cost you thousands of dollars in repairs and create frustrating, unnecessary travel delays. Surge protection in and around the home is commonplace in today's world. Surges, however, are not the only dangers to your electronic equipment. The quality of power entering a home is generally consistent; however, the same can not be said for RV parks. Power quality in RV parks is subject to vast fluctuations and is dependent upon many factors. Intensity of electrical loads placed on an RV park, weather conditions, faulty wiring, and undersized or deteriorating electrical connections affect the quality of power entering your RV. With today's RV containing sophisticated and sensitive electronics, a few short seconds of faulty power can damage equipment within the coach, such as inverters, converters, microwaves, TV's, and refrigerators.

### Surge Guard\* Bumper to Bumper Power Protection

Southwire's Surge Guard family of power protection devices are designed to protect your RV's electrical system and sophisticated electronics from the dangers of faulty electrical power. A variety of Surge Guard products protect your RV from:

- High/Low voltage
- Miswired pedestals
- Open neutral
- Open ground
- Reverse polarity
- · High neutral current
- Surges
- Overheating plug/receptacle

### Surge Guard\* RV Power Protection Don't Plug In Without It!



Surge Guard power protection devices shut off power if the voltage drops below 102V or rises above 132V. Once the voltage resumes within these parameters, power is restored to the RV with a time delay to account for AC head pressure bleed off. Surge Guard devices monitor for faulty wiring from the power pedestal and protects from reverse polarity and the dangers of open neutral and ground conditions. Patent-pending thermal protective plug/receptacles will shut off when overheating, reducing the risks of fire and damaged wires and plugs. Multi-mode surge protection eliminates the potential for power surges to enter the RV though power cables during electrical storms, and indicates when surge failure has occurred. Surge Guard power protection is available in portable and hardwire configurations.

# Surge Guard Automatic Transfer Switch Family

Surge Guard Automatic Transfer Switches (ATS) also includes RVC compatible devices. The ATS models transfer to generator power automatically when energized. When both shore power and generator power are available, generator dominates after a 30 second delay. Once the generator is shut down, shore power activates. Automatic Transfer Switch models are available with maximum spike current from 26,400A – 130,000A, and surge suppression from 2600 Joules – 3350 Joules. Some ATS models offer optional remote displays.

### Surge Guard\* Basic Portable



### **Model 44750**

With Ground Fault Protection 120V, 30A 10/3 AWG Cord

### **Perfect for Pop-ups and Travel Trailers**

- Automatically shuts off the power when ground faults are present
- Requires manual reset after a ground fault
- Weather resistant
- Most economically priced protection
- 510 Joules of power surge protection
- 8mA trip level
- Easy-T-Pull<sup>™</sup> handles
- Compatible with Surge Guard Lock Hasp model 34590
- 2.10"W x 20.15"L x 2.10"D



# Surge Guard\* 30A & 50A Surge Protectors with Enhanced Diagnostics



### **Perfect for Pop-ups and Travel Trailers**

- Identifies faulty park power and provides surge protection
- Increased receptacle brass thickness reduces heat
- Easy-T-Grip<sup>™</sup> handle with integrated receptacle
- Easy to read LED fault chart provides simple power analysis
- Includes anti-theft lock ring on cord
- Tests for and Indicates
  - Open neutral
  - Open ground
  - Reverse polarity
  - Open circuit/no power
  - Missing leg 1/leg 2 voltage \*50A only\*
  - Surge protection status
  - Overheating plug/receptacle

# Surge Guard\* 30A & 50A Surge Protectors

### **Model 44260**

120V, 30A 2100 Joules





### **Model 44270**

120/240V, 50A 4200 Joules



### **Perfect for Pop-ups and Travel Trailers**

- Identifies faulty park power plus offers surge protection
- Analyzes circuits to verify pedestal wiring
- Indicators illuminate to show power status
- Tests for and indicates:
  - Open ground
  - Open neutral
  - Correct polarity
- Easy-T-Pull<sup>™</sup> handles
- Compatible with Surge Guard Lock Hasp model 34590
- 44260: 2.41"W x 14.40"L x 1.85"D
- 44270: 3.06"W x 15.86"L x 1.85"D

## Surge Guard\* 30A & 50A Full Protection Portables

### **RV Side Electrical Protection**

### Model 34930 with LCD Display

120V, 30A 2450 Joules Model 34950 with LCD Display

120/240V, 50A 4200 Joules



# Total electrical protection from faulty park power and electrical issues inside the RV. Provides protection against:

- Power surges
- Open ground
- Open neutral
- Low (<102V) and High (>132V) voltage
- Overheating plug/ receptacle
- Reverse polarity
- Miswired pedestal
- High neutral current (50A model)
- Elevated ground line current
- Continuously monitors for and displays:
  - Voltage and Amp Draw (RMS)
- Includes anti-theft lock ring on cord
- Patent-pending RV side open neutral protection (50A only)
- Multi-mode surge suppression
- Commercial-grade, brass receptacle
- Automatic reset on power restoration
- 10 second start up sequence
- 128 second reset delay protects A/C compressor
- LCD display (English)
- Easy-T-Pull<sup>™</sup> handles
- 34930: 4.68"W x 21.50"L x 3.86"D
- 34950: 4.68"W x 22.00"L x 3.86"D

### Surge Guard\* 30A & 50A **Full Protection Hardwires**

### Model 35530

120V, 30A







### Model 35550

120/240V, 50A







**Optional** 

### **Optional**

Total electrical protection from faulty park power. **Provides protection against:** 

Reverse polarity

Miswired pedestal

- Power surges
- Open ground
- Open neutral
- Low (<102V)</p>
  - and High (>132V) voltage
- High neutral current (50A model)
- Continuously monitors for and indicates:
  - Voltage and Amp Draw (RMS)
  - Surge failure
- Multi-mode surge suppression
- Automatic reset on power restoration
- 128 second reset delay protects A/C compressor
- LCD display (English)
- Optional remote power monitor LCD display (p/n 40300 sold separately)
  - Joystick for easy screen navigation
  - Plug and Play for telecom jack equipped models
- 2450 Joules of power surge protection (Model 35530)
- 3850 Joules of power surge protection (Model 35550)
- 34520: 5.30"W x 11.12"L x 4.39"D
- 34560: 5.30"W x 11.39"L x 4.93"D

### Model 40240

**RV Power Protection** 120/240V, 50A, 60Hz







### Total electrical protection from faulty park power. **Provides protection against:**

- Power surges
- Open ground
- Open neutral
- Low (<102V)
- and High (>132V) voltage
- Reverse polarity
- Miswired pedestal
- High and low frequency
- Multi-mode surge suppression
- Automatic reset on power restoration
- 128 second reset delay protects A/C compressor
- LCD display (English)
- Remote power monitor LCD display (English)
  - Joystick for easy screen navigation
  - Voltage and current (continuously monitored and indicated)
- 3350 Joules of power surge protection
- 5.84"W x 12.75"L x 5.27"D
- Display: 4.75"W x 3.50"L x 1.50"D

# Basic 30A & 50A Automatic Transfer Switches

### **Model 41300**

120V, 30A, 60Hz





#### **Model 40100**

120/240V, 50A, 60Hz





- 30A Model 41300 has proprietary electrical interlock
- 50A Model 40100 has mechanical interlocking contactors
- Time delay at power up
- Transfers to generator power automatically when energized after 30 second delay. When both shore power and generator power are available, generator dominates after a 30 second delay. Once the generator is shut down, shore power activates after a 3-4 second delay.
- Dual contactor arrangement
- Does NOT provide surge protection
- **41300**: 5.58"W x 07.62"L x 3.31"D
- 40100: 5.84"W x 12.75"L x 5.27"D



### Surge Guard\* 50A Automatic Transfer Switch

### Model 41260 with Limited RV Power Protection

120/240V, 50A, 60Hz





- Transfers to generator power automatically when energized after 30 second delay (generator mode). When both shore and generator power are available, generator dominates after a 30 second delay. Once generator shuts down, shore power activates after 3 second delay.
- Limited protection from faulty park power.Provides protection against:
  - Power surges
  - Open neutral
  - Reverse polarity
- Multi-mode surge suppression
- 50A, FLA mechanical interlocking contactors
- UL approved UL1008 full transfer switch rating
- 2600 Joules of power surge protection
- 8.84"W x 12.75"L x 5.21"D

### Surge Guard\* 50A RVC Automatic Transfer Switch

### Model 40350-RVC RVC Compatible with Full RV Power Protection

120/240V, 50A, 60Hz







Optional

- Transfers to generator power automatically when energized after 30 second delay (generator mode). When both shore and generator power are available, generator dominates after a 30 second delay. Once generator shuts down, shore power activates after 3 second delay.
- Total electrical protection from faulty park power. Provides protection against:
  - Power surges
  - Open ground
  - Open neutral
  - Low (<102V) and High (>132V) voltage
  - Reverse polarity
  - Miswired pedestal
  - High and low frequency
- Multi-mode surge suppression
- RVC communication allows instant display of voltage, current and fault conditions on an RVC compatible device
- Indicator lights on front of ATS indicate presence of input power for L1 and L2
- Optional Remote Power Monitor LCD Display (P/N 40299 sold separately)
  - Voltage and current (continuously monitored and indicated)
  - · Easy to navigate faults in plain English
- 65A, FLA mechanical interlocking contactors
- UL approved UL1008 full transfer switch rating
- 3350 Joules of power surge protection
- 8.84"W x 12.75"L x 5.21"D

### Surge Guard\* 90A RVC Automatic Transfer Switch

### Model 41390-RVC RVC Compatible with Full RV Power Protection

120/240V, 90A, 60Hz







Optional

- Transfers to generator power automatically when energized after 30 second delay (generator mode). When both shore and generator power are available, generator dominates after a 30 second delay. Once generator shuts down, shore power activates after 3 second delay.
- Total electrical protection from faulty park power. Provides protection against:
  - Power surges
  - Open ground
  - Open neutral
  - Low (<102V) and High (>132V) voltage
  - Reverse polarity
  - Miswired pedestal
  - High and low frequency
- Multi-mode surge suppression
- RVC communication allows instant display of voltage, current, and fault conditions on an RVC compatible device Indicator lights on front of ATS indicate presence of input power for L1 and L2
- Optional Remote Power Monitor LCD Display (P/N 40299 sold separately)
  - Voltage and current (continuously monitored and indicated)
  - · Easy to navigate faults in plain English
- 95A, FLA mechanical interlocking contactors
- UL approved UL1008 full transfer switch rating
- 3350 Joules of power surge protection
- 8.94"W x 12.47"L x 5.27"D
- Display: 4.75"W x 3.50"L x 1.50"D



These voltage regulators do not protect against faults or surges.

### **Model 10176**

120V, 30A

■ For use on single phase, 2-wire services

#### Model 10175

120/240V, 50A

- For use on split phase, 3-wire services
- Can be used on 120/208V, 3-wire network

#### **Features**

- 10% voltage increase
- Open neutral tolerant
- Heavy duty transformer
- LED status lights indicate:
  - Open neutral
  - Under voltage
  - Over voltage
  - Phase reversal
  - Operating mode

#### **Benefits**

- Continuously monitors line voltage conditions
- Increases voltage to provide a very stable regulated and reliable source of power to the coach or travel trailer
- Helps prevent low voltage damage to appliances
- Fully automatic



### Surge Guard\* Accessories

Surge Guard\* Over-voltage Adapter

Model 44300 120V. 15A



- Provides connected equipment with over-voltage and limited surge protection
- Will turn off power to the connected equipment when a voltage above 140V is detected
- Over-voltage conditions can occur from an open-neutral in outlet wiring or from switching heavy loads, such as an airconditioner or washer and dryer, on and off

### Surge Guard\* Generator Neutral-Ground Bonding Plug Model 44400



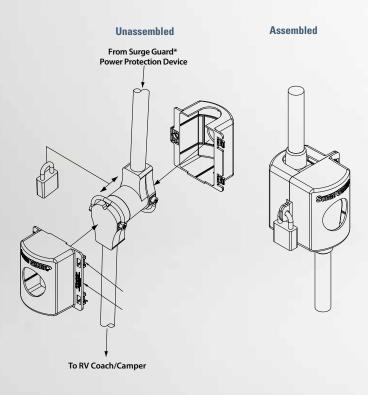
Most portable generators have a floating neutral. Surge Guard\* products will detect this as an open ground condition and not allow power to pass through. To solve this problem, insert the Surge Guard Generator Neutral-Ground Bonding Plug into a 15A receptacle on the generator control panel. This will create a neutral to ground bond and the open ground condition should be resolved. Please check the owner's manual of the generator to ensure the generator was designed with a floating neutral.

### Surge Guard\* Lock Hasp Model 34590



Lock not included

- Designed to prevent unauthorized removal of your Surge Guard electrical protector from your RV
- Fits all portable Surge Guard models and Surge Guard Voltage Regulators
- Easily attaches to standard 30A & 50A plugs
- Not compliant with Surge Guard models 44280, 44290, 34930, and 34950



### Digital Monitor Model AECM20020





- Fully tests incoming power for:
  - · Open ground
  - Reverse polarity
  - High/Low voltage
- Three display modes available:
  - Alternating voltage and frequency (VOLT/FREQ.)
  - Voltage only (VOLTAGE)
  - Frequency only (FREQUENCY)
- Accurate testing and monitoring of all AC power source types
- RMS voltage and frequency meter
- Multi-tone fault alarm
- Hands-free auto reset
- Advanced microelectronics
- One-button operation
- Wiring diagnostics
- LCD display with LED backlight
- UL listed



### A Multitude of Protection **Choices for Your RV**

	Select the level of protection your RV needs	30A Portable 44750	30A Portable 44280	50A Portable 44290	30A Portable 44260
	Over/Under Voltage (Input)				
	Open Neutral Protection (Input)				
	Open Neutral Protection (RV side)				
	Open Ground Protection				
	Overheating Plug/Receptacle Protection		Indicates	Indicates	
	Reverse Polarity Protection (Input)				
	Surge Failure Indication			•	•
	Miswired Pedestal Indication			•	•
	Ground Fault Protection	•			
	Time Delay at Power Up				
	Remote LCD Display				
	Built-In LCD Display				
	Weather Resistant	•	•	•	•
	UL Listed				
	Source Power Connection Diagnostics		•	•	•
	Lock Hasp Available	•			•
	Electrical Rating	120V, 30A	120V, 30A	120/240V, 50A	120V, 30A
	Surge Suppression (Joules)	510	2,100	4,200	2,100
	Max Spike Current	1,250A	6,500A	6,500A	6,500A

### Surge Guard\* 30A & 50A **Surge Protectors**

50A Portable 44270	30A Portable with LCD 34930	50A Portable with LCD 34950	30A Hardwire 35530	50A Hardwire 35550	50A Hardwire 40420
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	10 Sec.	10 Sec.	128 Sec.	128 Sec.	135 Sec.
			Optional	Optional	
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•					
120/240V, 50A	120V, 30A	120/240V, 50A	120V, 30A	120/240V, 50A	120/240V, 50A
4,200	2,450	4,200	2,450	3,850	3,350
6,500A	6,500A	6,500A	6,500A	6,500A	130,000A

# **Compare Automatic Transfer Switches**

### Select the level of protection your RV needs

30A Basic ATS 41300



Over/Under Voltage (Input)	
Open Neutral Protection (Input)	
Reverse Polarity Protection (Input)	
Miswired Pedestal Indication	
Open Ground Protection	
Time Delay at Power Up (3-4 sec.)	•
Remote Display (P/N 40299)	
Current (Amps) Measurement	
Source Power Connection Diagnostics	
Generator Dominant	•
Mechanical Interlocking Contactors	
Proprietary Electrical Interlock	•
Electrical Rating	120V, 30A
Surge Suppression (Joules)	N/A
Max Spike Current	N/A
Contactor Rating	30A, FLA
Safety Certified Standard	UL 1008

50A Basic ATS 40100	50A Limited Protection 41260	50A Full Protection 40350-RVC	90A Full Protection 41390-RVC
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		Optional	Optional
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120/240V, 50A	120/240V, 50A	120/240V, 50A	120/240V, 90A
N/A	2,600	3,350	3,350
N/A	76,400A	130,000A	130,000A
50A, FLA	50A, FLA	65A, FLA	95A, FLA
UL 1008	UL 1008	UL 1008	UL 1008

### **Limited Lifetime Warranty and Connected Equipment Coverage**

Select Surge Guard\* products are covered under the Limited Lifetime and Connected Equipment Warranty. This warranty provides coverage for select Surge Guard\* devices when properly installed according to Southwire's installation procedures, where defects in assembly, materials, or workmanship, caused it to operate outside of design specifications. Please keep in mind that each Surge Guard model includes different features and protection capabilities, thus each claim question should be handled directly between the customer and Southwire Company, LLC. Any misuse, abuse, tampering, or modifications made to the products will void the warranty and opportunity to file a claim under the connected equipment policy. The Limited Lifetime Warranty does not cover the purchase of used, salvaged, or refurbished products.

#### **Products Covered Under Limited Lifetime Warranty**

- 44260/44270 Surge Protectors with Diagnostics
- 44280/44290 Surge Protectors with Enhanced Diagnostics
- ■34930/34950 Full Protection Portable
- ■35530/35550 Full Protection Hardwire
- 44300 Over-voltage Adapter

#### What Is Connected Equipment Coverage?

The connected equipment portion of the Southwire Surge Guard warranty will cover the repair/replacement of property that was damaged as a result of a warrantable failure of a Surge Guard product. Since Surge Guard products provide different levels of protection, what can qualify under this coverage will be dependent upon the Surge Guard\* product being used. Depending on the individual claim, Southwire may request access to damaged equipment and site where damage occurred. Depending upon the claim, Southwire reserves the right to be subrogated under any existing insurance policies of the RV owner.

#### **Warranty Claim Process**

Contact Southwire technical support directly at 1-800-780-4324 to start the return and evaluation process. Please do not return the Surge Guard product in question to the dealer or retailer. Pending review and evaluation of the returned Surge Guard product, at its discretion, Southwire will provide a new replacement Surge Guard product of the same or a comparable model. Once an RMA number is issued, please ship the Surge Guard device to:

Return Materials Department Southwire Company, LLC 4525 140th Ave North, Suite 900 Clearwater, FL 33762

Claim processing requires proof of purchase with copy of original receipt with retail purchase date of November 27, 2017 or after to qualify under Southwire's Limited Lifetime and Connect Equipment

#### Where to find more information?

For complete warranty information, please visit rvpower.southwire.com to view full warranty policy.

# Protect what you value most!

### Surge Guard\* Products Protect Your RV Against:

**Power Surges** 

**Over/Under Voltage** 

**Miswired Pedestal** 

**Open Neutral** 

**Open Ground** 

Overheating Plug/Receptacle (Patent-Pending)

Available in 120V, 30A and 120/240V, 50A Portables and Hardwires and 120/240V, 50A and 90A RVC Compatible Automatic Transfer Switches

> Limited Lifetime and Connected Equipment Warranty



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