



RAPID SHUTDOWN SYSTEM

RSB-2S-US-10 & RSC-1X-US-10



IMAGE OF RAPID SHUTDOWN CONTROLLER FOR ILLUSTRATIVE PURPOSES ONLY

Reliable

- Optimal system reliability with hybrid switches for disconnecting
- Automatic self-test upon startup to ensure functionality

Perfect alignment

- Engineered for Sunny Boy-US and Sunny Boy TL-US inverter lines with multiple MPP tracking channels
- Compatible with Secure Power Supply

Code compliant

- UL-Certified and compliant with NEC 690.12 Rapid Shutdown
- No interference with AFCI function of Sunny Boy inverters

Cost effective

- Incorporated junction box reduces equipment and speeds installation time
- Pre-wired MC4 connectors and snap terminals reduce materials and installation time

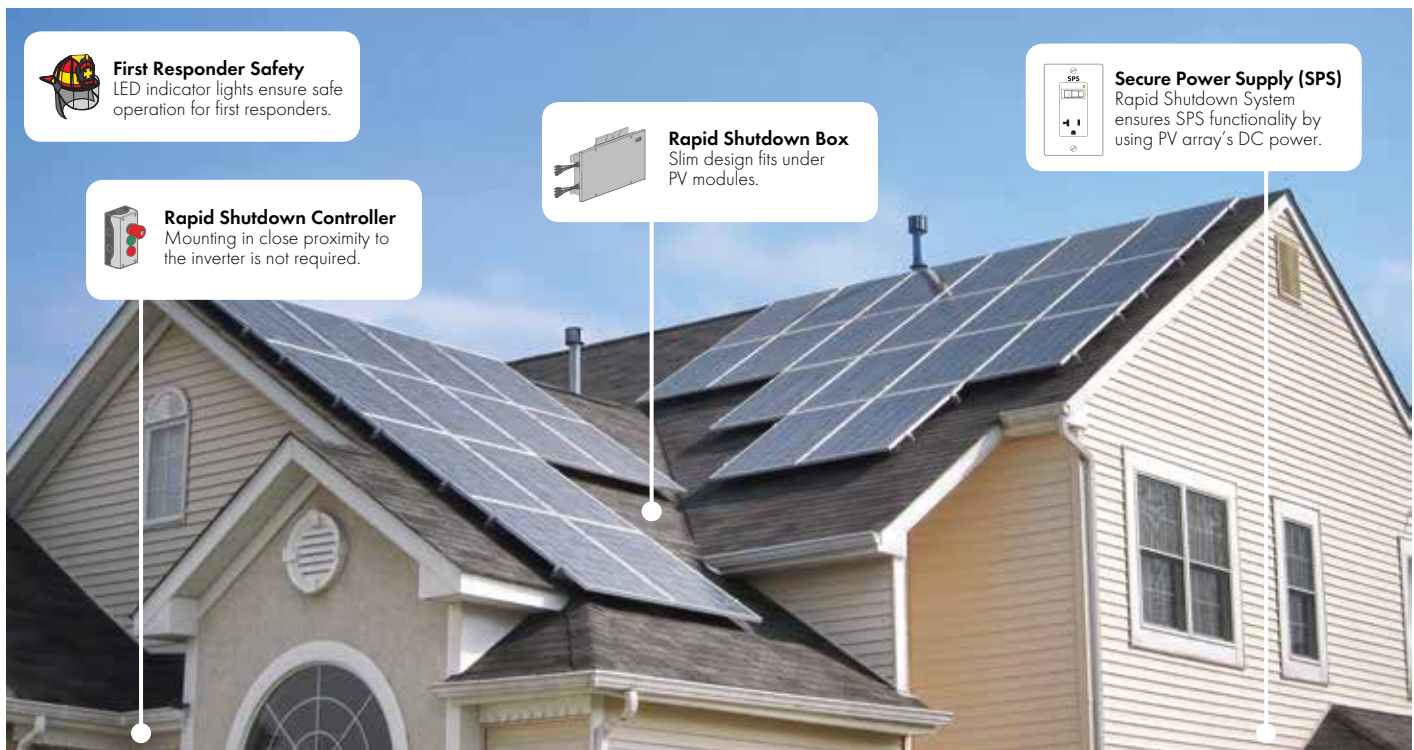
RAPID SHUTDOWN SYSTEM

Cost-effective system compliance

The SMA Rapid Shutdown System is the most cost-effective way to achieve NEC 690.12 Rapid Shutdown compliance for systems using Sunny Boy inverters. This DC powered system allows for the use of Secure Power Supply, providing opportunity power to homeowners during daytime grid outages. Hybrid switches and automatic self-test ensure system safety and durability, reducing risk and costs. Each component plays a critical role in a PV system; don't compromise your Sunny Boy's performance with any other rapid shutdown solution.

Technical data	Rapid Shutdown Box
General data	
Maximum input voltage	600 V DC
Minimum input voltage	110 V DC
Number of DC inputs	4 strings, 2 in parallel per channel
DC operating current per channel	20 A DC
Maximum input short circuit current per channel	36 A DC
Integrated power supply	DC powered by PV array (max. 5W)
Ambient temperature range	-40 °C to +75 °C
Dimensions without pre-wired cables (W x H x D)	542 x 340 x 75 mm / 21.3 x 13.4 x 2.95 in
Weight	3.8 kg / 8.4 lb
DC input	Cable whips with MC4 connectors
DC outputs wire size / terminal rating	AWG 12 to AWG 6 / 90 °C
Wire size control wires	AWG 18 to 16
Wire size grounding	AWG 10 to AWG 6
Enclosure rating	Type 4X
Enclosure finish	Aluminum
Conduit size (home run)	3/4 inch conduit
Conduit size (control wires)	2 x 1/2 inch for daisy chain wiring
Warranty	10 years
Compliance	NEC 2014 - 690.12; NEC 2017 - 690.12(B)(1); Canada CEC 2015 - 64-218
Safety listing and certification *	UL 1741 and CRD for PVRSS; CAN/CSA-C22.2 No. 107.1-01
Type designation	RSB-2S-US-10

Technical data	Rapid Shutdown Controller
General data	
Status indicator	2 LEDs
Dimensions (W x H x D)	80 x 153 x 104 mm / 3.15 x 6.02 x 4.1 in
Weight	0.3 kg / 0.72 lb
Ambient temperature range	-25 °C to +70 °C
Enclosure rating	Type 4X
Enclosure finish	Polycarbonate
Type designation	RSC-1X-US-10



*The SMA Rapid Shutdown System has been evaluated, tested, and listed to electrically discharge the PV generator conductors between the Rapid Shutdown Box and the inverter models noted within ten seconds of activation of the Rapid Shutdown Controller to ≤ 30 V. This is accomplished by isolating the PV array generator at the input side of the rapid shutdown box while simultaneously discharging the stored capacitive energy of the inverter models noted. It is certified to UL 1741 including Certification Requirement Decision April 02, 2015, for PV Rapid Shutdown Systems in compliance with article 690.12 of the NEC, CAN/CSA-C22.2 No. 107.1-01.

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