

PRELIMINARY 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 5.0-US/6.0-US and TL-US inverter lines with multiple MPP tracking channels
- Compatible with Secure Power Supply

Code compliant

- UL-Certified and compliant with 2014 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 2014 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 when other rapid shutdown systems would eliminate its functionality. 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
Max. channel short circuit current at STC	28 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 75.75 mm / 21.3 x 163.4 x 3 in
Weight	3.8 kg / 8.4 lb
DC input	Cable whips with MC4 connectors
Wire size DC outputs	AWG 12 to AWG 6
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, article 690.12
Safety listing and certification	UL 1741
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



First Responder Safety
LED indicator lights ensure safe operation for first responders.



Rapid Shutdown Box
Up to 20A per input, two strings parallel with daisy chain capabilities for larger systems.



Rapid Shutdown Controller
Mounting in close proximity to the inverter is not required.



Sunny Boy Inverter with SPS
Ensures Sunny Boy inverter's Secure Power Supply by using PV array's DC power.

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