FLEXware SkyBox Rapid Shutdown
Integrated Solution for PV Rapid Shutdown

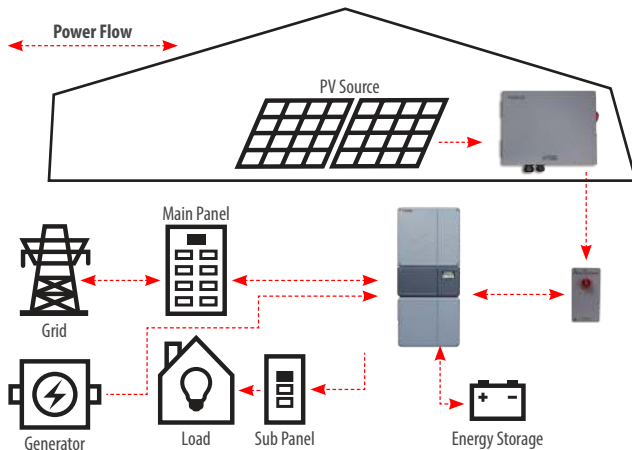FWPV3-FH600-S2D   Rapid Shutdown Initiator (RSI)

SkyBox RSD-1 System

Typical System Integration

Power Flow

PV Source

Main Panel

Grid

Generator   Load   Sub Panel   Energy Storage

Features:

- End-to-end solution listed to UL1741

- Type 3R enclosures rated for indoor or outdoor installation

- Flexible design—install the combiner box vertically or horizontally and mount to racking or under an array

- Interoperable with compatible third-party PV rapid shutdown devices (PVRSE with dry contact)

OutBack provides a fully-compliant PV rapid shutdown equipment plus combiner solution with the SkyBox RSD-1.

The FLEXware SkyBox Rapid Shutdown meets the following 2014 National Electric Code (NEC) requirements:

NEC 690.12—Rapid shutdown (provides a means for first responders to safely de-energize controlled conductors)

NEC 690.15—DC disconnect (opens all ungrounded circuit conductors from all sources of power)

The SkyBox RSD-1 is rated to 600VDC for integration in a wide range of systems and designed for ease of service and clean wire management. Components can be ordered for alternative system needs, including use with grid-direct PV inverters, and stacked SkyBox's.

Packages	SkyBox RSD-1
Description	SkyBox RSD-1 package for battery-based PV systems
Compatibility	Three PV strings
Combiner Box	(1) FWPV3-FH600-S2D
Power Supply	Class 2 DC power supply included
RSI	1
Rapid Shutdown	Yes
External Disconnect	Yes
PV AFCI	N/A

Combiner Box	FWPV3-FH600-S2D	Product Image
Description	FLEXware SkyBox combiner box with PV rapid shutdown, and disconnecting means compatible with up to 3 PV strings, opens up controlled conductors within 10ft of PV array	
Enclosure	**MATERIAL**: Powder-coated aluminum **RATING**: Outdoor rainproof, UL type 3R **SECURITY**: Lockable	
Mounting Options	Vertical to horizontal, external feet provided for mounting	
Number of String Inputs	3	
Total Maximum Current	48V	
Voltage Rating	600VDC	
Output Terminals	#14 - 2/0	
Input Terminals	Cable glands #14 to 8 AWG (2.08 to 7.7mm2)	
Operating Temperature	-25 to 60°C	
Overcurrent Protection	Includes (6) 600VDC DIN rail fuse holders (fuses sold separately)	
Switch	Can be locked in off position	
Accessories	**FUSE-15-600VDC**: Box of ten, 15A fuses **FUSE-20-600VDC**: Box of ten, 20A fuses **LBL-PVRSS**	
Dimensions H x W x D (in/cm)	15.5 x 19.5 x 4.5 / 39.4 x 49.5 x 11.4	
Weight (lb/kg)	~12 / 5.4	
Certifications	UL1741 with PVRSE, UL 1699/1699B, CSA 22.2 107.1-01 with PVRSE, FCC Part 15 Class B	

Rapid Shutdown Initiator	RSI	Product Image
Description	SkyBox RSD-1 RSI initiates a PV rapid shutdown event and provides indication for solar status	
Enclosure	**MATERIAL**: Powder-coated aluminum **RATING**: Outdoor rainproof, UL type 3R	
Mounting Options	Vertical	
Input Terminals	24-16 AWG (.20 to 1.31mm2)	
Compatibility	Can control up to 6 FWPV3-FH600-S2D combiners	
Operating Temperature	-25 to 60°C	
Switch	Can be locked in off position	
LED Indication	Solar on, solar off, AFCI	
Dimensions H x W x D (in/cm)	14.1 x 7.3 x 3.75 / 35.8 x 18.5 x 9.5	
Weight (lb/kg)	~4 / 1.8	
Certifications	UL1741 with PVRSS, UL 1699/1699B, CSA 22.2 107.1-01 with PVRSS, FCC Part 15 Class B	

DC Power Supply	PWRSPLY-24	Product Image
Description	SkyBox RSD-1 comes with a class 2 DC power supply. Optional AC power supply or other class 2 power supply may be used instead.	