



IMAGE FOR ILLUSTRATIVE PURPOSES ONLY

JMS-F SunSpec Rapid Shutdown Device

The easy module level
rapid shutdown solution

/ New screwless design for quick
and easy mounting



Cost-effective

- Simple plug-and-play installation
- No additional components necessary, reducing balance of system costs
- One solution for both residential and commercial

Simple and robust

- Power line based communication certified for compatibility with the SunSpec signal for rapid shutdown
- Shuts down PV module whenever SunSpec signal is interrupted
- Screwless design for quick and easy mounting

Safe and certified

- Certified and listed for compliance to:
 - » UL 1741 Rapid Shutdown System Equipment
 - » NEC 2023/2020/2017 690.12(B)(2) Rapid Shutdown of PV Systems on Buildings

Reduced risk

- Technical support from SMA's #1 ranked service organization
- Fully SunSpec certified solution when paired with approved SMA SunSpec certified inverters (SBxx-1SP-US-41, CORE1 STP-xx-US-41)*

The SunSpec Certified Rapid Shutdown System (model JMS-F), available from SMA, is the most cost-effective and reliable solution for fulfilling NEC 2023/2020/2017 Rapid Shutdown requirements.

The module-level device is certified for compatibility with the SunSpec communication signal and SMA inverters, making compliance simple and easy. By using the existing DC lines between the inverter and PV array for power line communications, installation and labor are significantly reduced. No additional wires or communication equipment is needed. The solution also features up to 50% fewer internal components vs alternatives, resulting in greater lifetime reliability.

* Not approved with Sunny Boy Smart Energy (SBSE-xx-US-50) and Sunny Tripower X (STP xx-US-50) inverters; planned in 2024.

Technical data	JMS-F
Input (DC)	
Rated DC input power	600 Wp
Maximum PV module open circuit voltage (Voc)	60 V
Minimum input voltage	10 V
Maximum continuous input current I_{MAX}	15 A
Maximum short-circuit input current I_{SC}	15 A
Output (DC)	
Output power range	0 W to 600 W
Maximum output voltage	60 V
Standby output voltage	1 V
Maximum system voltage	1500 V
Allowable series string connections	6 to 30 JMS-F devices
Mechanical	
Dimensions L / W / H	89 x 95.5 x 16.5 mm (3.5 x 3.76 x 0.65 in)
Weight (including cables)	0.97 lb (439 g)
Input / output connector	MC4
Output wire length	1.2 m
Operating temperature range	-40°C to +75°C (-40°F to +167°F)
Enclosure rating	Type 4X (as per UL 50E)
Relative humidity	0% to 100%
Features and compliance	
Certification	UL 1741 Rapid Shutdown Equipment
Communication mode	Power Line Communication (PLC)
SunSpec Rapid Shutdown Communication Protocol	SunSpec Certified
Rapid shutdown time	10 seconds
Warranty (contact SMA Service Line)	25 years
SunSpec Certified SMA inverters	Sunny Boy US (SBx.x-1SP-US-41) Sunny Tripower CORE1-US (STP xx-US-41)
Type designation	JMS-F
SMA part number	119814-00.02
Package quantity	40

SYSTEM DIAGRAM

