# SMA

## TS4-R-F SUNSPEC CERTIFIED RAPID SHUTDOWN DEVICE



### **Cost-effective**

- Simple to install via existing DC wires with no additional components necessary
- Produces more power than any other solution when paired with an SMA inverter's ShadeFix technology

#### Simple and robust

- Power line based communication compatible with SunSpec signal for rapid shutdown
- Shuts down PV module whenever SunSpec signal is interrupted

#### Safe and certified

- SunSpec certified rapid shutdown that fulfills:
  - » UL 1741
  - » NEC 2014
- » NEC 2017

#### Reduced risk

- Technical support from SMA's #1 ranked service organization
- The only fully SunSpec certified solution when paired with an SMA SunSpec certified inverter

## TS4-R-F SUNSPEC CERTIFIED RAPID SHUTDOWN DEVICE

The most simple, economical solution to install

The TS4-R-F SunSpec certified rapid shutdown device is a cost-effective way to fulfill UL 1741, NEC 2014, and NEC 2017 requirements. It is compatible with the power line based SunSpec communication signal for rapid shutdown, making it simple to implement with robust functionality. Using the existing DC wires between the inverter and module-level electronics as a communication channel significantly reduces installation time and labor costs, since no additional communication equipment is needed. When paired with the Sunny Boy or Sunny Tripower CORE1 inverter featuring proprietary ShadeFix technology, SMA's solution produces more power with greater reliability than any other alternative.

Technical data	<b>TS4-R-F</b> 478-00252-42
Input	
Rated DC input power	475 W
Maximum PV module open circuit voltage @ STC	75 V
Maximum input voltage	90 V
Maximum current lsc	12 A
Output	
Output power range	0 - 475 W
Output voltage range	0 - Voc
Communication type	SunSpec Rapid Shutdown
Rapid shutdown compliant (NEC 2017 690.12)	Yes
Maximum system voltage	1000 V
Maximum series fuse rating	15 A
Allowable series string connections	6 to 30 TS4-R-F devices
Mechanical	
Operating temperature range	-40°C to +85°C (-40°F to +185°F)
Non-operating temperature range	-40°C to +85°C (-40°F to +185°F)
Cooling method	Natural convection
Dimensions with cover	152.5 mm x 108 mm x 25.3 mm
Weight with cover	610 g
Environmental rating	IP68, NEMA 4X
Cabling	
Cabling type / Output cable length	H1Z2Z2-K / 1.2 m (solar cable, certified to EN 50618)
Cabling	MC4
UV resistance	500 hr with UVB light between 300 and 400 nm at 65° C
	TS4-R-F
Type designation	478-00252-42

