

TS4-R-F SUNSPEC RAPID SHUTDOWN

TS4-R-F



Cost-effective

- Simple to install via existing DC wires
- No additional components necessary, reducing balance of system costs

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 reliable

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

Reduced risk

- Technical support from SMA's #1 ranked service organization
- Simple, safe repair or replacement of proprietary snap-in cover—no cabling work

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Compliance made simple and economical

The new TS4-R-F rapid shutdown solution 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. The TS4-R-F's compliance with the SunSpec open standard makes it the most flexible solution on the market, as it can be combined with multiple types of inverters.

Technical data	TS4-R-F 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 I _{sc}	12 A
Output	
Output power range	0 - 475 W
Output voltage range	0 - V _{oc}
Communication type	SunSpec Rapid Shutdown
Rapid shutdown compliant (NEC 2017 690.12)	Yes
Maximum system voltage	1000 V
Maximum series fuse rating	15 A
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
Type designation	TS4-R-F 478-00252-42

