

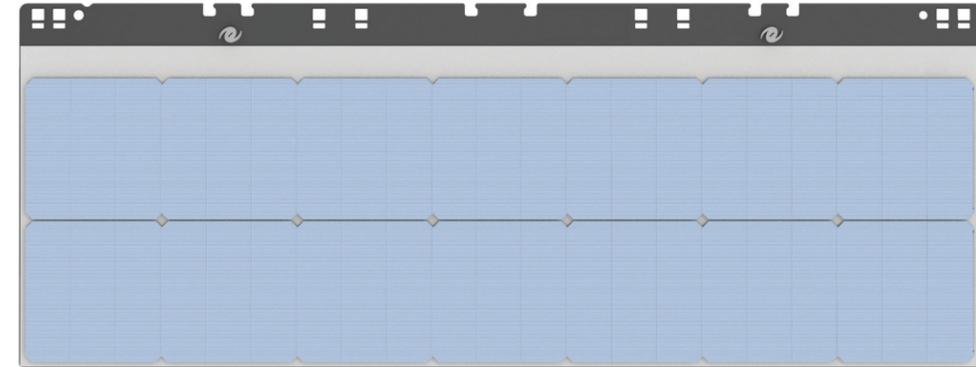
# SOLAR ROOF DATASHEET

FOR FULL TEAR-OFF AND OVERLAY INSTALLATIONS



## 14-CELL PV MODULE

MODEL #: SR72T1



### ELECTRICAL SPECIFICATIONS

Maximum open circuit voltage rating of connected branch circuits per diode (at STC): 14.2 V

Maximum series fuse rating: 10 A

Maximum system voltage: 600 V

Irradiance (W/m <sup>2</sup> )	Temp. (Celsius)	Voc (V)	Vmp (V)	Isc (A)	Imp (A)	Pmax (W)
1000	25	14.20	11.34	6.80	6.32	71.67

These electrical characteristics are within  $\pm 5\%$  of the indicated values of Isc, Voc, and Pmax under standard test conditions (irradiance of 1000 W/m<sup>2</sup>, AM 1.5 spectrum, and a cell temperature of 25 °C or 77 °F).

### MECHANICAL SPECIFICATIONS

Dimensions: 430 mm x 1140 mm

Thickness: Appx. 5 mm module thickness with 35.3 mm maximum height from deck

Principal Materials: Glass, Polymers, Fiberglass and Silicon

Installed System Weight: Textured Glass: 15 kg/m<sup>2</sup> or 3.1 psf

(Installed weights include all components of system above roof sheathing).

### ROOF PITCH RANGE

2:12 - 24:12

Certain features can be installed up to 62:12

### CERTIFICATIONS

UL 61730 (UL Listed); UL 9703 (UL Listed); UL 1741 (UL Listed)

UL 790 Class A (ETL Listed); ASTM D3161 Class F (ETL Listed); TAS100 (ETL Listed)

## SHEATHING SPECIFICATIONS

Solar Roof will be installed over bare solid or closely fitted sheathing, as follows:

- DOC PS-1 compliant / exterior grade plywood: minimum 15/32" (11.9 mm) thick or
- DOC POS-2 OSB sheathing: minimum 7/16" thick (11.1 mm) or
- Closely-fitted sheathing boards: minimum of 3/4" (19.1 mm) thick

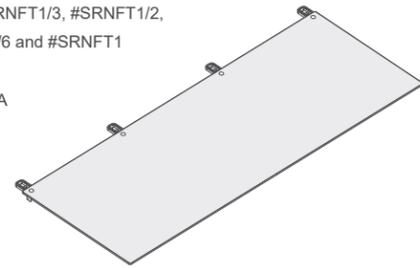
Solar Roof can also be installed over compatible existing roofs, as follows:

- Three-tab composition shingle, single layer
- Architectural composition shingle, single layer

Solar Roof will not be installed over raised presidential-style composition shingle, roofs with more than one layer of composition shingle, or existing non-composition shingle roof types like tiled roofs.

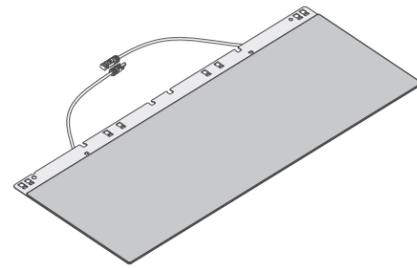
### ROOFING MODULES, FULL AND PARTIAL

Model #SRNFT1/6, #SRNFT1/3, #SRNFT1/2,  
#SRNFT2/3, #SRNFT5/6 and #SRNFT1  
Listed to UL 61730  
Listed to UL 790 Class A  
ASTM D3161 Class F  
TAS100



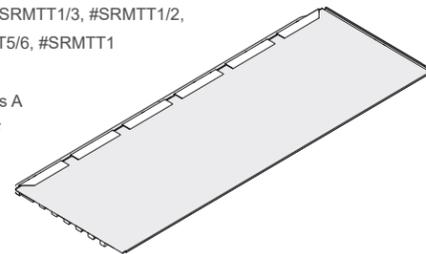
### PV MODULE

Model #SR60T1  
Listed to UL 61730  
UL 790 Class A  
ASTM D3161 Class F  
TAS100



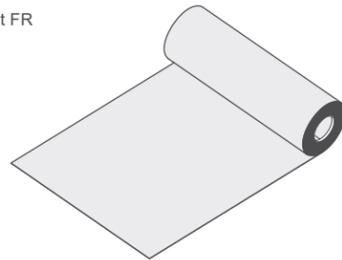
### METAL TILES, FULL AND PARTIAL

Model #SRMTT1/6, #SRMTT1/3, #SRMTT1/2,  
#SRMTT2/3, #SRMTT5/6, #SRMTT1  
Listed to UL 1897  
Listed to UL 790 Class A  
ASTM D3161 Class F  
TAS100



### UNDERLAYMENT

Model #SR-SAUL-1 or FT Cobalt FR  
ASTM D1970/ICC AC48  
ICC AC188  
ASTM E108 Class -A



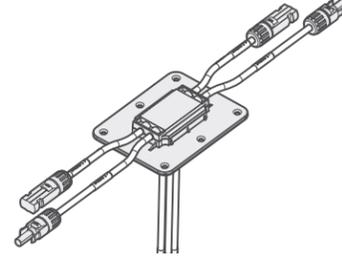
### DIODE HARNESS

Model #SRDTH  
UL 9703  
Listed (ZKLA) "PV Wire"  
Short and long lead variants  
interchangeable



### PASS THROUGH BOX

Model #SRPTB-4  
UL 1741, File #E318357



PVRSA Model: Solarglass Roof Rapid Shutdown Array Category QJIR, Report Date: 2021-06-11 (Rev 8-10-21)				
Table of Essential Elements				
Function	Manufacturer	Model No.	Firmware Versions and Checksums	Certification Standard
PVRSE Mid Circuit Interrupter (MCI)	Tesla	MCI-1 1550379 <sup>2</sup>	N/A	UL 1741 PVRSE
Inverter	Tesla	7.6 kW: 1538000 <sup>2</sup> 3.8 kW: 1534000 <sup>2</sup>	V4, CEA4F802 V4, FF7BE4E1	UL 1741, 1998 PVRSS/PVRSE
PV Module	Tesla	SR60T1, SR72T1	N/A	UL 61730
Diode Harness	Tesla	SRDTH	N/A	UL 9703
PV Wire Jumper(s)	Tesla	SR-BJ2X SR-BJ3X SR-BJ4X SR-BJMini	N/A	UL 9703
Pass-Through Box	Tesla	SRPTB-4	N/A	UL 1741
PVRSA Initiator <sup>1</sup> (See installation requirements below)	Non-Specific	N/A	N/A	N/A
<sup>1</sup> Dedicated PV system AC circuit breaker or AC disconnect switch, labeled per NEC 690.12 requirements. <sup>2</sup> Applies to variations of this part number with suffix of two numbers and one letter. Note: PVRSA installation requirements may reduce the effective equipment and component ratings below the individual equipment and component PVRSE ratings in order to achieve PVRSA shock hazard reduction requirements.				
PVRSA Installation Requirements				
<b>Max System Voltage</b>			600 Vdc	
<b>Max Array Internal Voltage After Actuation</b>			165 Vdc (cold weather open circuit)	
<b>Max Series-Connected Panels between MCIs:</b>			10	
Other Installation Instructions:				
1. An MCI must be connected to one end of each series string or mounting plane sub-array string.				
2. Verification that MCIs are installed with 10 or fewer modules between MCIs shall be documented for inspection, by voltage measurement logs and/or as-built string layout diagrams.				
3. The dedicated PV system AC circuit breaker or PV system AC disconnect switch shall serve as the PVRSA initiator and shall be sized and installed in accordance with NEC requirements. The specific part shall be identified on the as-built system drawings.				



Certification Mark of UL on the installation instructions is the only method provided by UL to identify products manufactured under its Certification and Follow-Up Service. The Certification Mark for these products includes the UL symbol, the words "CERTIFIED" and "SAFETY," the geographic identifier(s), and a file number."

PVRSA Model: ZS Rapid Shutdown Array (Applicable to ZS Comp, ZS Span, ZS Ramp, and ZS Seam) Category QJIR, Report Date: 2021-06-11 (Rev. 2021-08-10)				
Table of Essential Elements				
Function	Manufacturer	Model No.	Firmware Versions and Checksums	Certification Standard
PVRSE Mid Circuit Interrupter (MCI)	Tesla	MCI-1 1550379 <sup>2</sup>	N/A	UL 1741 PVRSE
Inverter	Tesla	7.6 kW: 1538000 <sup>2</sup> 3.8 kW: 1534000 <sup>2</sup>	V4, CEA4F802 V4, FF7BE4E1	UL 1741, 1998 PVRSS/PVRSE
PV Module	Hanwha/ Q-CELLS Tesla (Longi)	Q.PEAK DUO BLK-G5/SC310-320 Q.PEAK DUO BLK G6+/SC330-345 Tesla TxxxS (where xxx = 405 to 450, increments of 5)	N/A	UL 1703 UL 61730
Interlock	Tesla	ZEP 850-1613-001 ZEP 850-1388-001 ZEP 850-1281-001	N/A	UL 2703
Ground Zep	Tesla	ZEP 850-1511-001 ZEP 850-1172-002	N/A	UL 467 UL 2703
DC Wire Clip	Tesla	ZEP 850-1509-001 ZEP 850-1448-001	N/A	UL 1565
Homerun Wire Clip	Tesla	ZEP 850-1510-001		UL 1565
PVRSA Initiator <sup>1</sup> (See installation requirements below)	Non-Specific	N/A	N/A	N/A
<sup>1</sup> Dedicated PV system AC circuit breaker or AC disconnect switch, labeled per NEC 690.12 requirements. <sup>2</sup> Applies to variations of this part number with suffix of two numbers and one letter. Note: PVRSA installation requirements may reduce the effective equipment and component ratings below the individual equipment and component PVRSE ratings in order to achieve PVRSA shock hazard reduction requirements.				
PVRSA Installation Requirements				
<b>Max System Voltage</b>			600 Vdc	
<b>Max Array Internal Voltage After Actuation (cold weather open circuit)</b>			165 Vdc	
<b>Max Series-Connected Modules Between MCIs:</b>			3*	
*Exception: Tesla (Longi) modules installed in locations where the max V <sub>oc</sub> for 3 modules at low design temperature exceeds 165V shall be limited to 2 modules between MCIs.				
Other Installation Instructions:				
1. An MCI must be connected to one end of each series string or sub-array string.				
2. Verification that MCIs are installed with 3 or fewer modules between MCIs shall be documented for inspection, by voltage measurement logs and/or as-built string layout diagrams.				
3. The dedicated PV system AC circuit breaker or PV system AC disconnect switch shall serve as the PVRSA initiator and shall be sized and installed in accordance with NEC requirements. The specific part shall be identified on the as-built system drawings.				



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