SUNPOWER

T5 SOLAR ROOF TILE

SIMPLE INSTALLATION & GREATEST ENERGY OUTPUT

BENEFITS

The Most Energy per Rooftop

Produces more energy in an area- or weight-constrained space than any other roof system available today

Easy to Install with All-In-One Design

Solar panel, frame, and mounting system are integrated into one unit. No grounding or roof penetration needed.

Roof-Preserving

Compatible with all roof membranes. Smooth, lightweight design, combined with a non-penetrating installation, protects the roof and preserves roof warranties.

Long Lasting Durability

Aerodynamic design is resistant to high winds. Strong glass-filled polymer material offers long-term durability. Soiling is minimized with easy water runoff.



The SunPower™ T5 Solar Roof Tile is the most powerful solution for area- or weight-constrained flat rooftops. The T5 is the first photovoltaic roof product to combine solar panel, frame, and mounting system into a single pre-engineered unit. The non-penetrating tiles position SunPower highest efficiency solar panels at a 5-degree tilt, for greatest energy production.

Tiles interlock for secure, rapid installation and maximum power output. Smooth-edged, durable and lightweight polymer material designed for a 30-year life protects the roof and eliminates the need for electrical grounding. The patented design resists high winds and corrosion and is flexible to adapt to virtually any flat or low-slope roof.

SunPower's High-Efficiency Advantage — Up to Twice the Power

Comparable systems covering 1,000 m ²				
	Thin Film	Conventional	SunP	ower
Peak Watts / panel	65	215	300	315
PV Efficiency	9.0%	12.8%	18.4%	19.3%
W/m² (PV only)	90	128	184	193
PV Roof Coverage	100%	50%	85%	85%
Total kW	90	60	156	165







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EXCEPTIONAL EFFICIENCY & PERFORMANCE

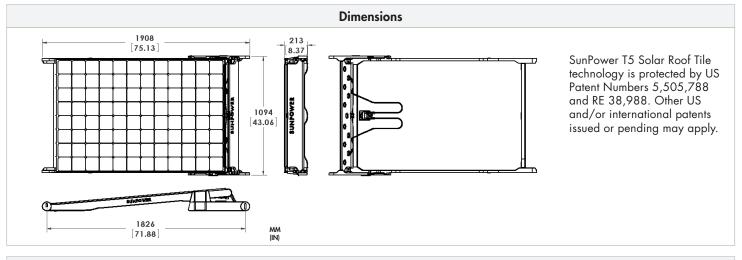
Measured at Standard Test Conditions	Electrical Date (STC): Irradiance 1000W	-	temperature 25° C
Nominal Power (+5/-3%)	P_{nom}	300 W	315 W
Rated Voltage	V_{mpp}	54.7 V	54.7 V
Rated Current	I _{mpp}	5.49 A	5.76 A
Open Circuit Voltage	V _{oc}	64.0 V	64.6 V
Short Circuit Current	I _{sc}	5.87 A	6.14 A
Maximum System Voltage	IEC	1000 V	
Temperature Coefficients	Power Voltage (V _{OC}) Current (I _{SC})	-0.38% -176.6 3.5 m.	6 mV / K
NOCT		45° C	+/-2° C
Series Fuse Rating		15 A	
Limiting Reverse Current (3-strings)	I _R	14.7 A	15.3 A

Electrical Data Measured at Nominal Operating Cell Temperature (NOCT): Irradiance 800W/m², AM 1.5			
Nominal Power	P_{nom}	220 W	231 W
Rated Voltage	V_{mpp}	50.1 V	50.1 V
Rated Current	I _{mpp}	4.40 A	4.62 A
Open Circuit Voltage	V _{oc}	59.9 V	60.5 V
Short Circuit Current	I _{sc}	4.75 A	4.97 A



	Mechanical Data
Solar Laminate	SunPower TM 300 Solar Panels, or SunPower 315 Solar Panels
Solar Cells	96 SunPower all-back contact monocrystalline
Front Glass	SunPower 300 Solar Panels: High transmission tempered glass SunPower 315 Solar Panels: High transmission tempered glass with anti-reflective (AR) coating
Junction Box	IP-65 rated with 3 bypass diodes, 32 x 155 x 128 (mm)
Output Cables	1000 mm length cables / MultiContact (MC4) connectors
Frame	Polymer material with fiber reinforcement, PPE+PS
Weight	21.3 kg; 11.7 kg/m² base weight
Roof Coverage	85% N-S

Warranty and Conformity to Standards	
Warranty	25-year limited power warranty 10-year limited product warranty
Certifications	IEC 61215 /61730-2 [Pending]



About SunPower

SunPower designs, manufactures, and delivers high-performance solar electric technology worldwide. Our high-efficiency solar cells generate up to 50 percent more power than conventional solar cells. Our high-performance solar panels, roof tiles and trackers deliver significantly more energy than competing systems.

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

Visit sunpowercorp.com for details