

SunPower Performance 7

SPR-P7-XXX-COM-L

Commercial Solar Panel

595–620 W | Up to 22.7% Efficient



Ideal for commercial applications



Framed glass-glass



Bifacial energy generation

Enhanced Power Density

With high efficiency TOPCon cell technology offering strong LETID/LID-resistance, increased bifacial energy capture, and a lower temperature coefficient, SunPower Performance panels are uniquely engineered to deliver more lifetime energy compared to standard solar panels.

Proven Reliability

SunPower Performance panel durability is maximized in all types of weather conditions from an innovative shingled-cell design that features flexible interconnects that withstand the stresses of daily temperature swings, an advanced encapsulant that shields components from humidity-induced corrosion, one-third-cut cells that are partitioned through ‘non-destructive cutting’ that reduces the risk of cell micro-cracks, and an advanced electrical architecture that offers resilience against the effects of shade, while mitigating hot-spot formation.



Comprehensive Warranty Coverage

Each SunPower Performance panel is manufactured with the absolute confidence to deliver more energy and greater reliability over time—and backed by one of the industry’s most comprehensive warranties.

Product and power coverage	30 / 30 Years
Year 1 minimum warranted output	99.0%
Maximum annual degradation	0.4%



Electrical Data, Front STC Characteristics¹

	SPR-P7-620-COM-L	SPR-P7-615-COM-L	SPR-P7-610-COM-L	SPR-P7-605-COM-L	SPR-P7-600-COM-L	SPR-P7-595-COM-L
Nominal Power (P _{nom})	620 W	615 W	610 W	605 W	600 W	595 W
Power Tolerance	+3/0%	+3/0%	+3/0%	+3/0%	+3/0%	+3/0%
Panel Efficiency	22.7%	22.5%	22.3%	22.1%	21.9%	21.7%
Rated Voltage (V _{mpp})	42.00 V	41.80 V	41.60 V	41.40 V	41.20 V	41.00 V
Rated Current (I _{mp})	14.77	14.72	14.67	14.62	14.57	14.52
Open-Circuit Voltage (V _{oc}) (+/-3%)	49.40 V	49.20 V	49.00 V	48.80 V	48.60 V	48.40 V
Short-Circuit Current (I _{sc}) (+/-4%)	15.63	15.60	15.57	15.54	15.51	15.48

Bifacial Gain²

P _{max} with 5% Bifacial Gain	651 W	646 W	641 W	635 W	630 W	625 W
I _{sc} with 5% Bifacial Gain	16.41 A	16.38 A	16.35 A	16.32 A	16.29 A	16.25 A
P _{max} with 10% Bifacial Gain	682 W	677 W	671 W	666 W	660 W	655 W
I _{sc} with 10% Bifacial Gain	17.19 A	17.16 A	17.13 A	17.09 A	17.06 A	17.03 A
P _{max} with 20% Bifacial Gain	744 W	738 W	732 W	726 W	720 W	714 W
I _{sc} with 20% Bifacial Gain	18.76 A	18.72 A	18.68 A	18.65 A	18.61 A	18.58 A

Electrical Data

Bifaciality (φ _{Pmax})	80% +/-10%
Maximum System Voltage	1500 V IEC
Temperature	-40°C to +85°C
Maximum Series Fuse	30 A
Power Temp. Coef.	-0.29% / ° C
Voltage Temp. Coef.	-0.25% / ° C
Current Temp. Coef.	0.045% / ° C

Packaging Configuration

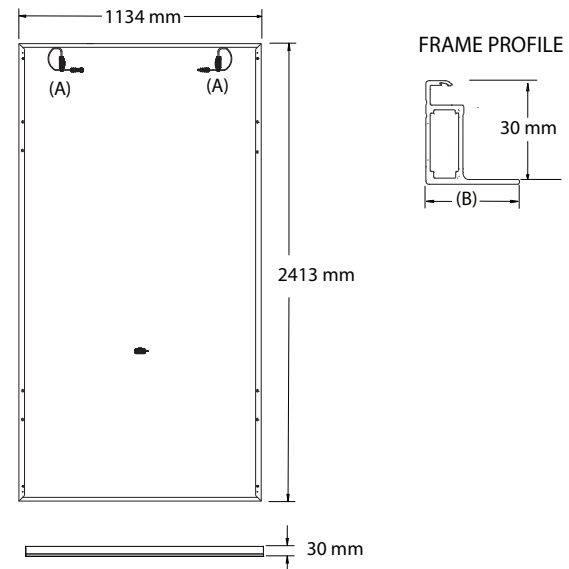
Number of modules per pallet
Number of pallets per 40ft HQ container
Number of modules per container

Mechanical Data

Solar Cells	N-type Topcon
Glass	2.0 mm + 2.0 mm, high transmission heat strengthened glass, AR coating on front glass
Junction Box	IP-68, 3 bypass diodes
Connector	Renhe RHC2 or Zerun Z4S or Stäubli Evo2
Encapsulant	PoE
Weight	33.5 kg
Max. Load ³	Wind: 2400 Pa, 245 kg/m ² front & back Snow: 5400 Pa, 550 kg/m ² front
Impact Resistance	40 mm diameter hail at 27.5 m/s
Frame	Silver anodized aluminum alloy

Tests And Certifications (Pending)

Standard Tests	IEC 61215, IEC 61730 Rated to 1500 V
Fire Rating	Class C (IEC 61730)
Quality Certs	ISO 9001:2015, ISO 14001:2015
EHS Compliance	ISO 45001-2018, Recycling Scheme
Ammonia Test	IEC 62716
Dust and Sand	IEC 60068-2-68
Salt Spray Test	IEC 61701 (Severity 8)
LeTID Test	TUV 2fg 2689/04.19 (LeTID Detection)
PID Test	IEC 62804



Please read the safety and installation instructions. Visit www.sunpower.maxeon.com/int/PVInstallGuideIEC. Paper version can be requested through techsupport.ROW@maxeon.com.



1 Standard Test Conditions (1000 W/m² irradiance, AM 1.5, 25° C). NREL calibration Standard: SOMS current, LACCS FF and Voltage.
 2 The additional gain from the back side of the panel compared to the power of the front side of the panel at the standard test conditions. It depends on mounting (structure, height, tilt angle etc.) and albedo of the underlying surface.
 3 As per IEC 61215-2016 tested and certified. See Safety and Installation Guideline for details.