

Solaria PowerXT 430R-PL

Achieving over 20% efficiency, Solaria PowerXT solar panels are one of the highest power panels in the residential and commercial solar market. Compared to conventional panels, Solaria PowerXT panels have fewer gaps between the solar cells; this leads to higher power and superior aesthetics. Solaria PowerXT Pure Black™ panels are manufactured with black backsheet and frames, enhancing a home or building's architectural beauty.



High Efficiency, High Power

Solaria PowerXT panels achieve up to 20.4% efficiency. Solaria PowerXT panels are one of the highest power panels available.



High Quality and Reliability

Solder-less cell interconnections are highly reliable and designed to far exceed the industry leading 30 year warranty.



Improved Aesthetics

Compared to conventional panels, Solaria PowerXT panels have a more uniform appearance and superior aesthetics.



Lower System Costs

Solaria PowerXT panels produce more power per square meter area. This reduces installation costs due to fewer balance of system components.



Improved Shading Tolerance

Sub-strings are interconnected in parallel, within each of the four panel quadrants, which dramatically lowers the shading losses and boosts energy yield.



PID Resistant

Solaria PowerXT panels are PID resistant. This insures stable and predictable energy production over time.



About Solaria

Established in 2000, The Solaria Corporation has created one of the industry's most respected IP portfolios, with over 250 issued and pending patents in PV solar cell and module technology. Headquartered in California, Solaria has developed a technology platform that unlocks the potential of solar energy.



Performance at STC (1000W/m², 25° C, AM 1.5)

Solaria PowerXT		420R-PL	430R-PL
Max Power (P _{max})	[W]	420	430
Efficiency	[%]	19.9	20.4
Open Circuit Voltage (V _{oc})	[V]	45.7	45.7
Short Circuit Current (I _{sc})	[A]	11.60	11.87
Max Power Voltage (V _{mp})	[V]	37.9	37.9
Max Power Current (I _{mp})	[A]	11.09	11.35
Power Tolerance	[%]	-0/+3	-0/+3

Performance at NOCT (800W/m², 20°C Amb, Wind 1 m/s, AM 1.5)

Max Power (P _{max})	[W]	310	317
Open Circuit Voltage (V _{oc})	[V]	43.0	43.0
Short Circuit Current (I _{sc})	[A]	9.36	9.57
Max Power Voltage (V _{mp})	[V]	34.6	34.6
Max Power Current (I _{mp})	[A]	8.95	9.15

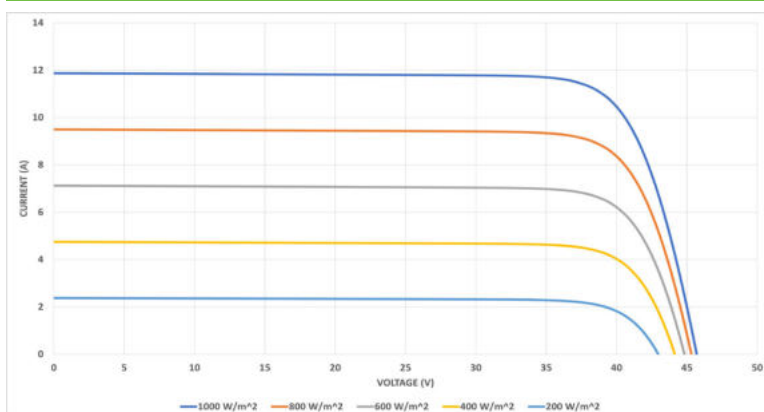
Temperature Characteristics

NOCT	[°C]	45 +/-2
Temp. Coeff. of P _{max}	[% / °C]	-0.39
Temp. Coeff. of V _{oc}	[% / °C]	-0.29
Temp. Coeff. of I _{sc}	[% / °C]	+0.04

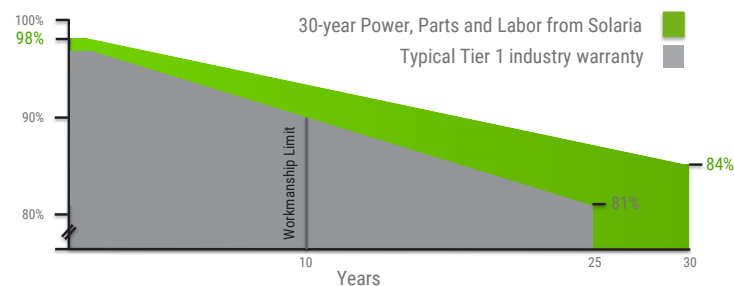
Design Parameters

Operating temperature	[°C]	-40 to +85
Max System Voltage	[V]	1000
Max Fuse Rating	[A]	20
Bypass Diodes	[#]	4

IV Curves vs. Irradiance (430W Panel)



Comprehensive 30-Year Warranty



Mechanical Characteristics

Cell Type	Monocrystalline Silicon
Dimensions (L x W x H)	77" x 42.5" x 1.38" 1957mm x 1079mm x 35mm
Weight	21.7 kg / 47.8 lbs
Glass Type / Thickness	AR Coated, Tempered / 2.8mm
Frame Type	Black Anodized Aluminum
Cable Type / Length	12 AWG PV Wire (UL) / 1200mm
Connector Type	MC4
Junction Box	IP68 / 4 diodes
Front Load	5400 Pa / 113 psf*
Rear Load	3600 Pa / 75 psf*

* Refer to Solaria Installation Manual for details

Certifications / Warranty

Certifications	UL 61730 / IEC 61215 / IEC 61730 CEC & FSEC Listed
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Fire Type (UL 1703)	1
Warranty	30 years*

* Warranty details at www.solaria.com

Packaging

Stacking Method	Horizontal / Palletized
Panels/ Pallet	29
Pallet Dims (L x W x H)	78.7" x 45" x 50.1" 2000mm x 1143mm x 1273mm
Pallet Weight	696 kg / 1533 lbs
Pallets / 40-ft Container	22
Panels / 40-ft Container	638

