

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 25 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 |

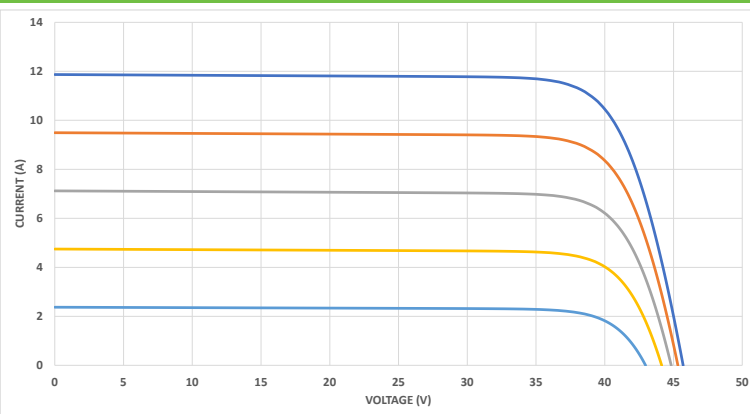
Temperature Characteristics

| | | |
|----------------------------------|----------|---------|
| 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 |

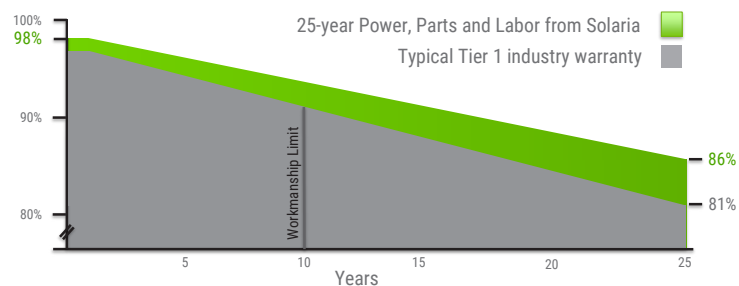
Design Parameters

| | | |
|-----------------------|------|------------|
| 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 25-Year Warranty



Mechanical Characteristics

| | |
|------------------------|---|
| Cell Type | Monocrystalline Silicon |
| Dimensions (L x W x H) | 77" x 42.4" x 1.38" 1957mm x 1076mm x 35mm |
| Weight | 21 kg / 47 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 |
|----------------|---|

| | |
|---------------------|-----------|
| Fire Type (UL 1703) | 1 |
| Warranty | 25 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 44.9" x 50.1" 2000mm x 1140mm x 1273mm |
| Pallet Weight | 672 kg / 1481 lbs |
| Pallets / 40-ft Container | 22 |
| Panels / 40-ft Container | 638 |

