

Solaria PowerX-400R Performance Series

Achieving over 20.5% efficiency, Solaria PowerX Performance solar panels feature Solaria's core cell cutting technology, offering higher-power and attractive black-on-black aesthetics compared to conventional solar panels. Solaria has been the market leader in cut-cell technologies for over a decade. With a comprehensive 25-year warranty, PowerX delivers the latest in power and reliability for homeowners.



High Efficiency, High Power

At 400 watts and 20.5% efficiency, Solaria PowerX solar panels are one of the highest power residential panels available.



High Quality and Reliability

State-of-the-art cell cutting technology and advanced panel construction ensure that PowerX panels are highly reliable and designed to far exceed the industry-leading 25-year warranty.



All Black Aesthetics

Compared to conventional panels, Solaria PowerX panels have a more uniform all-black appearance.



Best System Value

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



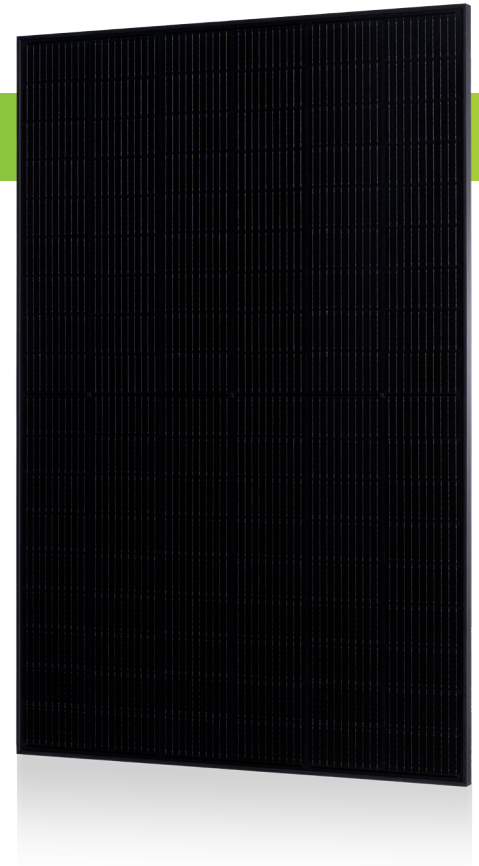
Improved Shading Tolerance

Sub-strings are interconnected in parallel, which dramatically lowers the shading losses and boosts energy yield.



Low Light Performance

PowerX maintains high efficiency at low irradiance further ensuring maximum energy yield.



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 PowerX- | | 390R | 395R | 400R |
|--|-----|-------|-------|-------|
| Max Power (P _{max}) | [W] | 390 | 395 | 400 |
| Efficiency | [%] | 20.0 | 20.2 | 20.5 |
| Open Circuit Voltage (V _{oc}) | [V] | 36.9 | 37.1 | 37.3 |
| Short Circuit Current (I _{sc}) | [A] | 13.52 | 13.60 | 13.68 |
| Max Power Voltage (V _{mp}) | [V] | 30.6 | 30.8 | 31.0 |
| Max Power Current (I _{mp}) | [A] | 12.73 | 12.82 | 12.9 |
| Power Tolerance | [%] | -0/+3 | -0/+3 | -0/+3 |

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

| | | | | |
|--|-----|-------|-------|-------|
| Max Power (P _{max}) | [W] | 290 | 293 | 297 |
| Open Circuit Voltage (V _{oc}) | [V] | 34.3 | 34.5 | 34.7 |
| Short Circuit Current (I _{sc}) | [A] | 11.01 | 11.10 | 11.13 |
| Max Power Voltage (V _{mp}) | [V] | 28.50 | 28.60 | 28.76 |
| Max Power Current (I _{mp}) | [A] | 10.20 | 10.26 | 10.32 |

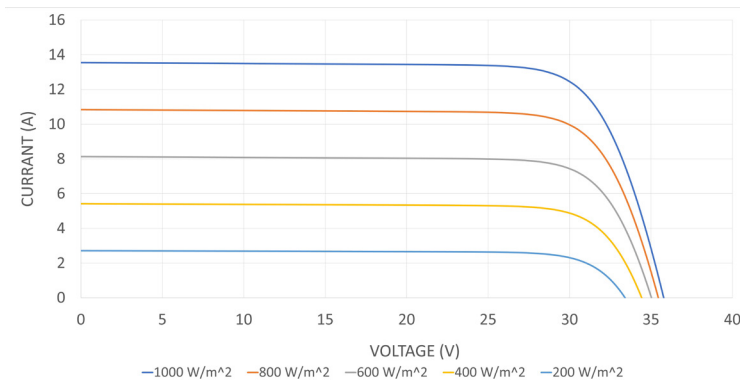
Temperature Characteristics

| | | |
|----------------------------------|----------|---------|
| NOCT | [°C] | 45 +/-2 |
| Temp. Coeff. of P _{max} | [% / °C] | -0.36 |
| Temp. Coeff. of V _{oc} | [% / °C] | -0.28 |
| Temp. Coeff. of I _{sc} | [% / °C] | 0.048 |

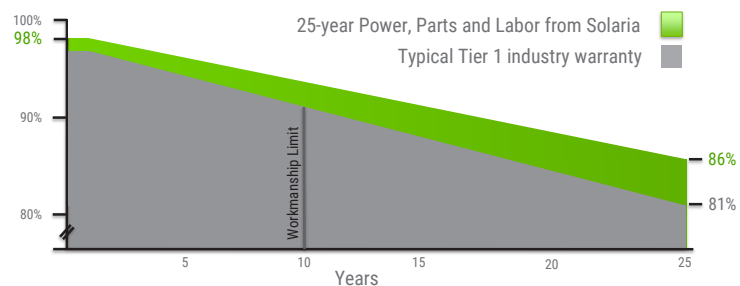
Design Parameters

| | | |
|-----------------------|------|------------|
| Operating temperature | [°C] | -40 to +85 |
| Max System Voltage | [V] | 1000 |
| Max Fuse Rating | [A] | 25 |
| Bypass Diodes | [#] | 3 |

IV Curves vs. Irradiance (400W Panel)



Comprehensive 25-Year Warranty



Mechanical Characteristics

| | |
|------------------------|------------------------------|
| Cell Type | Monocrystalline Silicon |
| Dimensions (L x W x H) | 67.8" x 44.7" x 1.4" |
| | 1723mm x 1134mm x 35mm |
| Weight | 22.1 kg / 48.7 lbs |
| Glass Type / Thickness | AR Coated, Tempered / 3.2mm |
| Frame Type | Black Anodized Aluminum |
| Cable Type / Length | 12 AWG PV Wire (UL) / 1100mm |
| Connector Type | Staubli MC4 |
| Junction Box | IP68 / 3 diodes |
| Front Load | 5400 Pa / 113 psf* |
| Rear Load | 2400 Pa / 50 psf* |

* Refer to Solaria Installation Manual for details

Certifications / Warranty

| | |
|-------------------------------|----------------------------------|
| Certifications | UL 61730 / IEC 61215 / IEC 61730 |
| Fire Type (UL 1703) | 2 |
| Power, Parts & Labor Warranty | 25 years* |

* Warranty details at www.solaria.com

Packaging

| | |
|---------------------------|--------------------------|
| Stacking Method | Vertical / Palletized |
| Panels/ Pallet | 31 |
| Pallet Dims (L x W x H) | 69.3" x 44.3" x 49.3" |
| | 1760mm x 1125mm x 1253mm |
| Pallet Weight | 745 kg / 1642 lbs |
| Pallets / 40-ft Container | 26 |
| Panels / 40-ft Container | 806 |

