



Solaria PowerXT®-400R-PM

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.

Higher Efficiency, Higher Power

Solaria PowerXT panels achieve over 20% efficiency; conventional panels achieve 15% – 17% efficiency. Solaria PowerXT panels are one of the highest power panels available.

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.

Improved Aesthetics

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

Durability and Reliability

Solder-less cell interconnections are highly reliable and designed to far exceed the industry leading 25 year warranty.

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 Fremont, California, Solaria has developed a technology platform that unlocks the potential of solar energy, allowing it to be ubiquitous and universally accessed.



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

Solaria PowerXT-		400R-PM
Max Power (P _{max})	[W]	400
Efficiency	[%]	20.2
Open Circuit Voltage (V _{oc})	[V]	51.1
Short Circuit Current (I _{sc})	[A]	9.82
Max Power Voltage (V _{mp})	[V]	42.4
Max Power Current (I _{mp})	[A]	9.41
Power Tolerance	[%]	-0/+3

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

Max Power (P _{max})	[W]	295
Open Circuit Voltage (V _{oc})	[V]	48.1
Short Circuit Current (I _{sc})	[A]	7.92
Max Power Voltage (V _{mp})	[V]	40.0
Max Power Current (I _{mp})	[A]	7.59

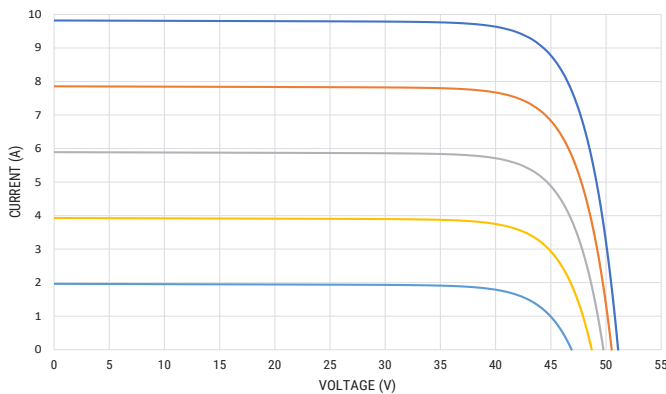
Temperature Characteristics

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

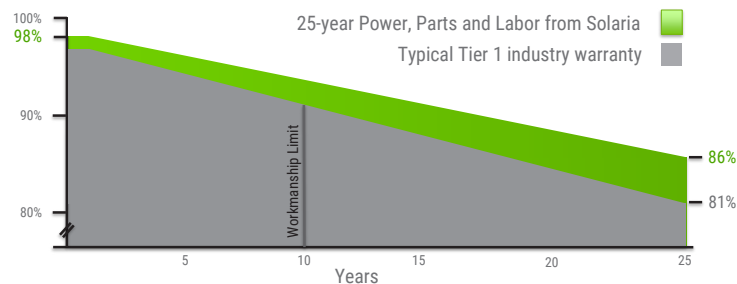
Design Parameters

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

IV Curves vs. Irradiance (400W Panel)



Comprehensive 25-Year Warranty



Mechanical Characteristics

Cell Type	Monocrystalline Silicon
Dimensions (L x W x H)	64.72" x 47.4" x 1.57"
	1644mm x 1204mm x 40mm
Weight	21 kg / 46 lbs
Glass Type / Thickness	AR Coated, Tempered / 2.84mm
Frame Type	Black Anodized Aluminum
Cable Type / Length	12 AWG PV Wire (UL) / 1000mm
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	25 years*

* Warranty details at www.solaria.com

Packaging

Stacking Method	Horizontal / Palletized
Panels/ Pallet	25
Pallet Dims (L x W x H)	66.57" x 48.7" x 48.4"
	1691mm x 1238mm x 1230 mm
Pallet Weight	590 kg / 1300 lbs
Pallets / 40-ft Container	18
Panels / 40-ft Container	450

