



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. Developed in the USA, Solaria's patented cell cutting creates a highly reliable PowerXT cell where busbars and ribbon interconnections, common failure points, are eliminated. Solaria's patented panel assembly then packages the cells into the PowerXT solar panel, reducing inactive space between the cells. This process leads to an exceptionally cost effective and efficient solar panel.

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.



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 encompassing materials, processes, applications, products, manufacturing automation and equipment. Headquartered in California, USA, Solaria has developed a technology platform that unlocks the potential of solar energy. Solaria panels are designed and engineered in USA. Country of Manufacture: China



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

PowerXT-		400R-PM
Max Power (P _{max})*	[W]	400
Efficiency	[%]	20.2
Open Circuit Voltage (V _{oc})*	[V]	51.68
Short Circuit Current (I _{sc})*	[A]	9.97
Max Power Voltage (V _{mp})	[V]	43.08
Max Power Current (I _{mp})	[A]	9.28
Power Range	[W]	-0/+5

* Measurement Tolerance P_{max} +/-3%, Tolerance V_{oc} +/- 2%, Tolerance I_{sc} +/- 4%

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

Max Power (P _{max})	[W]	294.2
Open Circuit Voltage (V _{oc})	[V]	47.73
Short Circuit Current (I _{sc})	[A]	8.05
Max Power Voltage (V _{mp})	[V]	39.22
Max Power Current (I _{mp})	[A]	7.50

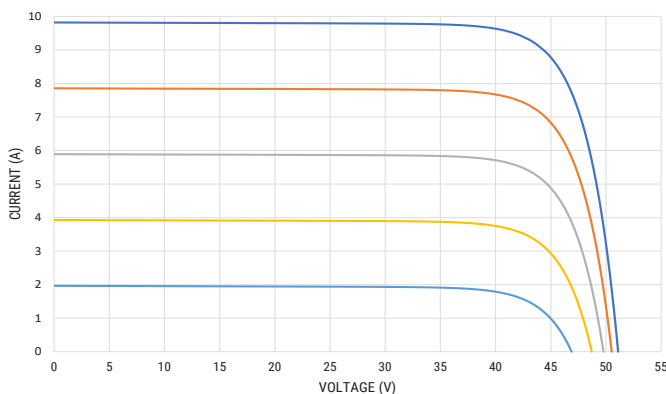
Temperature Characteristics

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

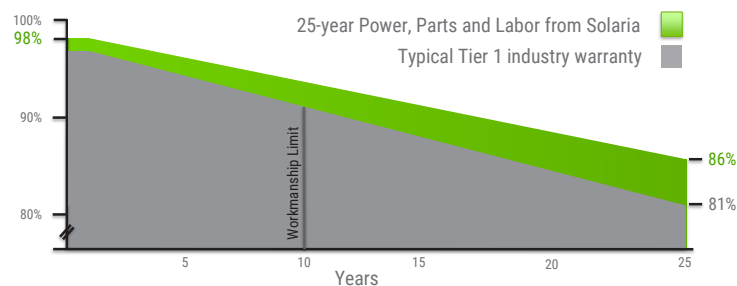
Design Parameters

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)	1644mm x 1204mm x 40mm 64.7" x 47.4" x 1.6"
Weight	21 kg / 46 lbs
Glass Type / Thickness	AR Coated, Tempered / 2.8mm
Frame Type	Black Anodised Aluminum
Cable Type / Length	12 AWG PV Wire (UL) / 1000mm
Connector Type	Genuine MC4 (Male: PV-KST4, Female: PV-KBT4)
Junction Box	IP68 / 4 diodes
Front Load	5400 Pa*
Rear Load	3600 Pa*

* Refer to Solaria Installation Manual for details

Certifications / Warranty

Certifications	IEC 61215/61730 (Ed. 2016)
Fire Class (UL 790)	C
Safety Class	IEC 61140, Class II
Power, Parts & Labor Warranty	25 years*

* Warranty details at www.solaria.com/australia

Packaging

Stacking Method	Horizontal / Palletised
Panels/ Pallet	25
Pallet Dims (L x W x H)	67.7" x 49.6" x 49.1" 1720mm x 1260mm x 1246mm
Pallet Weight	575 kg / 1268 lbs
Pallets / 40-ft Container	18
Panels / 40-ft Container	450

