SOLARIA®

Solaria PowerXT®-365R-PD

Achieving 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 California, Solaria's patented cell cutting and panel assembly takes processed solar wafers and turns them into PowerXT solar panels. The process starts by creating a highly reliable PowerXT cell where busbars and ribbon interconnections are eliminated. Solaria 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 up to 20.5% 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 Oakland, CA, Solaria has developed a technology platform that unlocks the potential of solar energy. Country of Manufacture: Korea

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Product specifications are subject to change without notice.   Rev 1A 1-2020

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

Solaria PowerXT-		365R-PD
Max Power (Pmax)	[W]	365
Efficiency	[%]	20.2
Open Circuit Voltage (Voc)*	[V]	48.0
Short Circuit Current (Isc)*	[A]	9.58
Max Power Voltage (Vmp)	[V]	39.9
Max Power Current (Imp)	[A]	9.16
Power Tolerance	[%]	-0/+3

* Voc and Isc tolerance +/-5%

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

Max Power (Pmax)	[W]	269
Open Circuit Voltage (Voc)	[V]	45.1
Short Circuit Current (Isc)	[A]	7.73
Max Power Voltage (Vmp)	[V]	36.7
Max Power Current (Imp)	[A]	7.32

Temperature Characteristics

NOCT	[ºC]	45 +/-2
Temp. Coeff. of Pmax	[% / ºC]	-0.39
Temp. Coeff. of Voc	[% / ºC]	-0.29
Temp. Coeff. of Isc	[% / ºC]	0.04

Design Parameters

Operating temperature	[ºC]	-40 to +85
Max System Voltage	[V]	1000
Max Fuse Rating	[A]	15
Bypass Diodes	[#]	4

IV Curves vs. Irradiance (370W Panel)
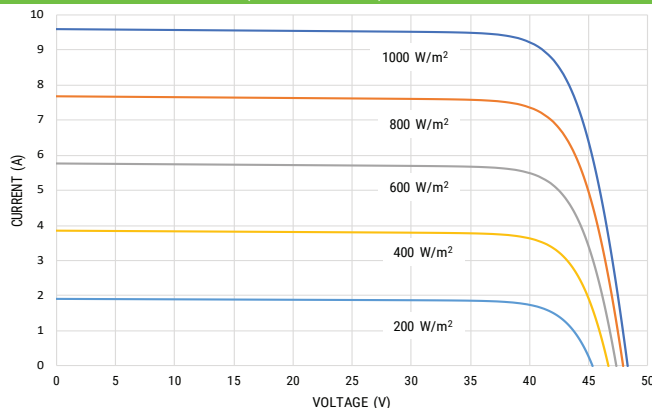
Comprehensive 25-Year Warranty

25-year Power, Parts and Labor from Solaria
Typical Tier 1 industry warranty
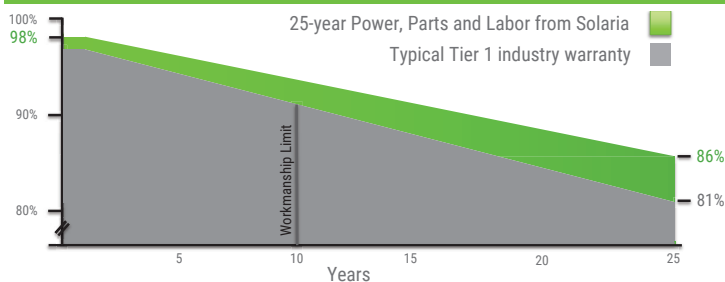
Mechanical Characteristics

Cell Type	Monocrystalline Silicon
Dimensions (L x W x H)	1621mm x 1116mm x 40mm
Weight	21 kg / 46 lbs
Glass Type / Thickness	AR Coated, Tempered / 3.2mm
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	IP67 / 4 diodes
Front Test Load	5400 Pa / 113 psf*
Rear Test Load	3600 Pa / 75 psf*

* Refer to Solaria Installation Manual for details. 3600 Pa uplift is for bolted installation only.

Certifications / Warranty

Certifications	IEC61215/61730 (ed. 2016)
	UL61730/CAN-CSA61730
Fire Class (UL 790)	C
Power, Parts & Labor Warranty	25 years*

* Warranty details at www.solaria.com/australia

Packaging

Stacking Method	Horizontal / Palletised
Panels / Pallet	25
Pallet Dimensions	1668 x 1150 x 1230 mm
Pallet Weight	590 kg / 1300 lbs
Pallets / 40-ft Container	28
Panels / 40-ft Container	700