

Solaria PowerXT™ | Residential



Achieving over 19% efficiency, Solaria's PowerXT™ solar modules are one of the highest efficiency modules available in the industry. Developed in California, Solaria's patented cell cutting and assembly form 'high density' sub-strings, larger than conventional solar cells, which are packed more efficiently and reduce inactive space between cells. By utilizing a ribbon-less interconnection process, cells are cut and overlaid without soldering which creates a highly reliable power unit assembly. The PowerXT module is electrically designed to reduce the power losses due to shadowing across the module by utilizing parallel connections between sets of sub-strings within each quadrant of the module. By removing visual gaps between cells on the conventional modules, the PowerXT module provides a visually stunning appearance to any rooftop solar system. The PowerXT modules are manufactured with a white backsheet (ie PowerXT-330R-WX) or a black backsheet (ie PowerXT-320R-BX).

Higher Efficiency, Higher Power

PowerXT modules achieve over 19% efficiency, greater than conventional silicon modules at 16-17% efficiency, making Solaria modules one of the highest available.

Lower System Costs

Higher efficiency modules produces more power per square meter area, which translates to less modules, the balance of system components, and installation cost.

Improved Shading Tolerance

Sub-strings are interconnected in parallel, within each of the four module quadrants, which dramatically lowers the shading losses and boosts energy yield.

Improved Aesthetics

Large sub-strings reduce inactive space within a module and create a premium "look and feel" compared to conventional modules.

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 100 patents encompassing materials, processes, applications, products, manufacturing automation and equipment. 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.









PowerXT-330R-WX | PowerXT-320R-BX

Mechanical Characteristic

Cell Type

Sub-strings

Performance at STC (100	0W/m²,	, 25° C, AN	И 1.5)¹		
		Power	XT-BX	Power	KT-WX
Max Power (Pmax)	[W]	315	320	325	330
Efficiency	[%]	18.7	18.7	19.0	19.3
Open Circuit Voltage (Voc)	[V]	44.2	44.2	44.3	44.5
Short Circuit Current (Isc)	[A]	9.42	9.42	9.44	9.47
Max Power Voltage (Vmp)	[V]	36.2	36.2	36.4	36.6
Max Power Current (Imp)	[A]	8.84	8.84	8.93	9.02
Power Tolerance	[%]	0/+3	0/+3	0/+3	0/+3
Performance at NOCT (800W/m², 20°C Amb, Wind 1 m/s, AM 1.5)					
Performance at NOCT (800)	<i>N</i> /m², 2	:0°C Amb, 1	Wind 1 m/	s, AM 1.5)	
Performance at NOCT (800) Max Power (Pmax)	<i>W</i> /m², 2 [W]	.0°C Amb, \ 235	Wind 1 m/ 235	s, AM 1.5) 239	243
				· · · · · · · · · · · · · · · · · · ·	243 41.0
Max Power (Pmax)	[W]	235	235	239	
Max Power (Pmax) Open Circuit Voltage (Voc)	[W] [V]	235 40.7	235 40.7	239 40.8	41.0
Max Power (Pmax) Open Circuit Voltage (Voc) Short Circuit Current (Isc)	[W] [V] [A]	235 40.7 7.61	235 40.7 7.61	239 40.8 7.63	41.0 7.65
Max Power (Pmax) Open Circuit Voltage (Voc) Short Circuit Current (Isc) Max Power Voltage (Vmp)	[W] [V] [A] [V] [A]	235 40.7 7.61 33.7	235 40.7 7.61 33.7	239 40.8 7.63 34.6	41.0 7.65 34.8
Max Power (Pmax) Open Circuit Voltage (Voc) Short Circuit Current (Isc) Max Power Voltage (Vmp) Max Power Current (Imp)	[W] [V] [A] [V] [A]	235 40.7 7.61 33.7	235 40.7 7.61 33.7	239 40.8 7.63 34.6	41.0 7.65 34.8

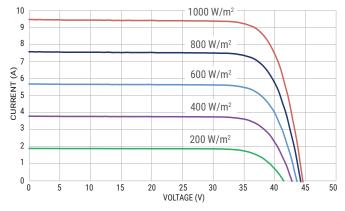
NOCT	[°C]	
Temp. Coeff. of Pmax	[% / °C]	
Temp. Coeff. of Voc	[% / °C]	

-0.32[% / °C] Temp. Coeff. of Isc 0.05

Design Parameters

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

IV Curves vs. Irradiance (330W Module)



Authorized Dealer



Cells per Module	68
Dimensions (L x W x H)	1623mm x 1055mm x 40mm
Weight	20 kg / 40 lbs
Glass Type / Thickness	AR Coated, Tempered / 3.2mm
Frame Type	Anodized Aluminum
Cable Type / Length	12 AWG PV Wire (UL) / 1000mm
Connector Type	Amphenol H4 (MC 4 compatible)
Junction Box	IP67 / 4 by-pass diodes
Front Load (UL 1703)	5400 Pa / 113 psf
Rear Load (UL 1703)	3600 Pa / 75 psf
Certifications / Warranty	
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Certifications	UL 1703 / IEC 61215 / IEC 61730
Fire Type (UL 1703)	I

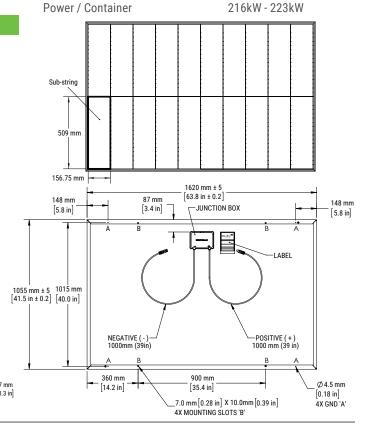
Mono Silicon PERC

20

25 years*

Power & Product Warranty

Packaging	
Stacking Method	Horizontal / Palletized / Clear Wrap
Pcs / Pallet	26
Pallet Dims	1740 x 1130 x 1163 mm
Pallet Weight	600 kg / 1323 lbs
Pallets /Container	26
Pcs / Container	676



^{*} Warranty details at www.solaria.com/warranty