

Solaria PowerXT® | Residential



Achieving up to 19.4% efficiency, Solaria PowerXT solar modules are one of the highest power modules in the residential solar market. Compared to conventional modules, Solaria PowerXT modules have fewer gaps between the solar cells; this leads to higher power and superior aesthetics. Solaria PowerXT residential modules are manufactured with black backsheet and frames, giving them a striking appearance.

Developed in California, Solaria's patented cell cutting and module assembly takes processed solar wafers and turns them into PowerXT solar modules. 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 module, reducing inactive space between the cells. All of the above leads to an exceptionally efficient solar module produced in a cost effective manner.

Higher Efficiency, Higher Power

Solaria PowerXT modules achieve up to 19.4% efficiency; conventional modules achieve 15% – 17% efficiency. Solaria PowerXT modules are one of the highest power modules available.

Lower System Costs

Solaria PowerXT modules 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 module quadrants, which dramatically lowers the shading losses and boosts energy yield.

Improved Aesthetics

Compared to conventional modules, Solaria PowerXT modules 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 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.







Copyright @ 2017 The Solaria Corporation Rev 1E 12-21-2017



Solaria PowerXT®-350R-PD Solaria PowerXT®-345R-BD

Performance at STC (1000W/m², 25° C, AM 1.5)					
Solaria PowerXT-		340R-BD	345R-BD	345R-PD	350R-PD
Max Power (Pmax)	[W]	340	345	345	350
Efficiency	[%]	18.8	19.1	19.1	19.4
Open Circuit Voltage (Voc)	[V]	46.9	47.1	46.9	47.1
Short Circuit Current (Isc)	[A]	9.36	9.40	9.46	9.49
Max Power Voltage (Vmp)	[V]	38.6	38.9	38.5	38.8
Max Power Current (Imp)	[A]	8.79	8.88	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)					
Max Power (Pmax)	[W]	252	255	255	259

Performance at NOCT (800W/m², 20°C Amb, Wind 1 m/s, AM 1.5)					
Max Power (Pmax)	[W]	252	255	255	259
Open Circuit Voltage (Voc)	[V]	44.1	44.3	44.1	44.3
Short Circuit Current (Isc)	[A]	7.58	7.61	7.66	7.69
Max Power Voltage (Vmp)	[V]	35.5	35.8	35.4	35.7
Max Power Current (Imp)	[A]	7.03	7.10	7.15	7.22

emperature Characteristics		
NOCT	[°C]	45 +/ - 2
Temp. Coeff. of Pmax	[% / °C]	-0.39
Temp. Coeff. of Voc	[% / °C]	-0.29
Temp. Coeff. of Isc	[% / °C]	0.04

Design Parameters Operating temperature [°C] -40 to +85 [V] Max System Voltage 1000 [A] Max Fuse Rating 15 **Bypass Diodes** [#]





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 Anodized Aluminum 12 AWG PV Wire (UL) / 1000mm Cable Type / Length Amphenol H4 (MC4 compatible)

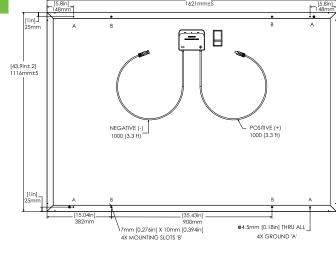
Mechanical Characteristics

Connector Type

IP67 / 4 diodes Junction Box 5400 Pa / 113 psf Front Load (UL 1703) Rear Load (UL 1703) 3600 Pa / 75 psf

Certifications / Warranty	
Certifications	UL 1703/IEC 61215/IEC 61730/CEC
Fire Type (UL 1703)	1
Power & Product Warranty	25 years*
* Warranty details at www.solaria.com	

Packaging				
Stacking Method	Horizontal / Palletized			
Pcs / Pallet	25			
Pallet Dims (L x W x H)	1685 x 1150 x 1230 mm			
Pallet Weight	590 kg / 1300 lbs			
Pallets / 40-ft Container	28			
Pcs / 40-ft Container	700			



MOUNTING SLOT

