

# Solaria PowerXT® | Residential



Achieving up to 20% 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 20% 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.







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# Solaria PowerXT®-355R-BD

Performance at STC (1000W/m², 25° C, AM 1.5)					
Solaria PowerXT-		340R-BD	345R-BD	350R-BD	355R-BD
Max Power (Pmax)	[W]	340	345	350	355
Efficiency	[%]	18.8	19.1	19.4	19.6
Open Circuit Voltage (Voc)	[V]	46.9	47.1	47.4	47.7
Short Circuit Current (Isc)	[A]	9.36	9.40	9.44	9.48
Max Power Voltage (Vmp)	[V]	38.6	38.9	39.2	39.5
Max Power Current (Imp)	[A]	8.79	8.88	8.94	8.99
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	258	261
Open Circuit Voltage (Voc)	[1/]	111	112	116	11 Q

Performance at NOCT (800W	//m², 2	20°C Amb	, Wind 1 m/	s, AM 1.5)	
Max Power (Pmax)	[W]	252	255	258	261
Open Circuit Voltage (Voc)	[V]	44.1	44.3	44.6	44.8
Short Circuit Current (Isc)	[A]	7.58	7.61	7.61	7.64
Max Power Voltage (Vmp)	[V]	35.5	35.8	36.1	36.3
Max Power Current (Imp)	[A]	7.03	7.10	7.15	7.19

Temperature 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
Max System Voltage	[V]	1000
Max Fuse Rating	[A]	15
Bypass Diodes	[#]	4



\* Refer to Solaria Installation Manual for details

# Certifications / Warranty

Power & Product Warranty

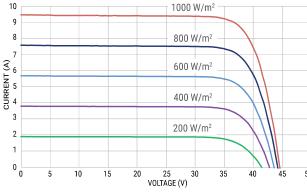
Certifications UL 1703/IEC 61215/IEC 61730/CEC CAN/CSA-C22.2
Fire Type (UL 1703) 1

25 years\*

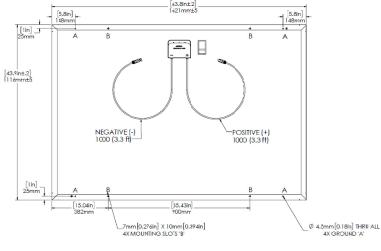
\* Warranty details at www.solaria.com

Packaging	
Stacking Method	Horizontal / Palletized
Pcs / Pallet	25
Pallet Dims	1668 x 1150 x 1230 mm
Pallet Weight	590 kg / 1300 lbs
Pallets / 40-ft Container	28
Pcs / 40-ft Container	700

#### IV Curves vs. Irradiance (350W Module)









The Solaria Corporation 6200 Paseo Padre Parkway, Fremont, CA 94555 P: (510) 270-2500 www.solaria.com Product specifications are subject to change without notice.

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