

Solaria PowerXT® | Commercial



At over 400Wp rating, Solaria PowerXT solar modules are one of the highest power products available today. Solaria PowerXT modules are ideal for utility projects by requiring fewer balance of system components and thus reducing installation time. Solaria PowerXT commercial modules are manufactured with a white backsheet (PowerXT-405C-WX) or black backsheet (PowerXT-400C-BX).

Developed in California, Solaria's patented cell cutting and module assembly form high-density sub-strings, 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 highly reliable sub-string assemblies in a cost effective manner.

Higher Efficiency, Higher Power

Solaria PowerXT modules achieve over 19% efficiency, while conventional silicon 72-cell 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, 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.

Easily Integrated with Solaria PowerVision™ Architectural Solar

Additional benefits of Solaria PowerVision include attractive aesthetics, compelling economics, energy efficiency, high energy yield and design flexibility.

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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Performance at STC (1000W/m², 25° C, AM 1.5)					
		Power	XT-BX	Power	XT-WX
Max Power (Pmax)	[W]	395	400	400	405
Efficiency	[%]	18.7	19.0	19.0	19.3
Open Circuit Voltage (Voc)	[V]	45.0	45.2	45.0	45.2
Short Circuit Current (Isc)	[A]	11.33	11.38	11.44	11.48
Max Power Voltage (Vmp)	[V]	37.4	37.6	37.3	37.5
Max Power Current (Imp)	[A]	10.57	10.64	10.73	10.80
Power Tolerance	[%]	-0/+3	-0/+3	-0/+3	-0/+3
Performance at NOCT (800W/m², Wind 1 m/s, AM1.5)					
Max Power (Pmax)	[W]	290	294	294	298
Open Circuit Voltage (Voc)	[V]	41.4	41.6	41.4	41.6
Short Circuit Current (Isc)	[A]	9.08	9.15	9.23	9.27

Tomporature Characteristics					
Max Power Current (Imp)	[A]	8.61	8.68	8.75	8.82
Max Power Voltage (Vmp)	[V]	33.7	33.9	33.6	33.8
Short Circuit Current (Isc)	[A]	9.08	9.15	9.23	9.27
Open Circuit Voltage (Voc)	[V]	41.4	41.6	41.4	41.6
Max Power (Pmax)	[W]	290	294	294	298

Temperature orianacteristics			
NOCT	[°C]	45 +/-2	
Temp. Coeff. of Pmax	[% / °C]	-0.40	
Temp. Coeff. of Voc	[% / °C]	-0.32	
Temp. Coeff. of Isc	[% / °C]	0.05	

Design Parameters		
Operating temperature	[°C]	-40 to +85
Max System Voltage	[V]	1000
Max Fuse Rating	[A]	20
Bypass Diodes	[#]	3

12 1000 W/m² 10 800 W/m^2 600 W/m² CURRENT (A) 400 W/m² 200 W/m² 2 0 0 10 15 25 30 35 40 50 VOLTAGE (V)



IV Curves vs. Irradiance (405W Module)

Mechanical	Characteristics

Monocrystalline Silicon
2113 x 995 x 40 mm
29 kg / 64 lbs
AR Coated, Tempered / 4.0mm
Anodized Aluminum
12 AWG PV Wire (UL) / 1200mm
Amphenol H4 (MC4 compatible)
IP67 / 3 diodes
5400 Pa / 113 psf
2400 Pa / 50 psf

Certifications / Warranty

Certifications	UL 1703 / IEC 61215 / IEC 61730
Fire Type (UL 1703)	7
Power & Product Warranty	25 years*

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

Packaging

Stacking Method	Horizontal / Palletized / Clear Wrap
Pcs / Pallet	20
Pallet Dims	2200 x 1120 x 1190 mm
Pallet Weight	618 kg / 1363 lbs
Pallets / 40-ft Container	20
Pcs / 40-ft Container	400

