Frequently Asked Questions

1. Are the Solaria PowerXT® modules certified?
The Solaria PowerXT® modules are certified to UL 1703 with an industry-leading Type 1 Fire Rating. Additionally, they have IEC 61215/61730 certification and are listed on the California Energy Commission's "Go Solar California" website for SB-1 compliant products, commonly referred to as "The CEC List": http://www.gosolarcalifornia.org/equipment/pv_modules.php
Note: SB-1 compliance allows the modules to qualify for Federal and State rebate and/or tax incentives where applicable.

2. Explain how Solaria makes these modules?
Solaria utilizes a unique and proprietary process for cutting and connecting solar cells into a format that enables them to be "shingled" together instead of connected with traditional bussing ribbons. This unique format allows Solaria to make higher power modules that typically match Voltage and Current requirements for micro inverters and power optimizers.

3. **How are Solaria modules different than other modules?**
Traditional modules utilize copper ribbons to interconnect all the cells in the module together by means of high-temperature soldering processes. Although this method is the most common it is not the most efficient. Busbars are needed to cover a portion of the solar cells (as much as 3.5%) and require the cells to be spaced apart from one other. In a traditional module, over 100 feet of ribbon is required to enable all of these connections; that is a lot of copper and many potential failure points. Solaria modules don't require copper ribbons, thus increasing the module power and long-term reliability. Since the Solaria PowerXT® modules are manufactured with black backsheet, black frame, and no visible busbars, they have an attractive appearance, which is popular with residential customers.

4. Why do the PowerXT® modules produce more power?
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. This "cell shingling" allows more cells to be placed into the module and is further able to extract more power per cell due to reduction of wasted "white space" and shading from the busbars. Thus, PowerXT® modules have higher power AND higher efficiency than traditional solar panels.

5. What is the efficiency of the PowerXT® module?

Our 330Wp product has a module efficiency of 19.3%. Module efficiency is calculated based on power per unit area of the entire module including the frame. Beware of companies who advertise the cell efficiency rather than the actual module efficiency. For example, a standard module utilizing a 18% efficient cell will yield a 17% module.

6. What is Solaria's warranty?

Solaria makes it easy for the installer and homeowner with a simple, 25-year, "bumper-to-bumper" linear power warranty. http://www.solaria.com/residential-commercial

7. Any special requirements for mounting?

No, Solaria uses an industry standard 40mm anodized aluminum frame that is compatible with most UL2703 certified racking systems. Check with your installer for specific mounting options available. The PowerXT® Installation Manual describes allowable mounting methods in more detail.

8. Does the PowerXT® module work with Microinverters and Power Optimizers?

Yes, although the power is higher than standard modules the voltage and current characteristics of the module are within the allowable operating window of most major suppliers of Module Level Power Electronics (MLPE) including Enphase, SolarEdge, Darfon, and APSystems. The following is a chart of commonly available MLPE products and their corresponding Solaria compatible product numbers. These are subject to change so always verify the latest MLPE product specs with the manufacturer or supplier.

Product Type	Company	Product ID
Microinverter	Enphase	M250, C250, S280
DC Optimizer	SolarEdge	P320, P400, P405, P700, P730
Microinverter	Darfon	G320, MIG300
Microinverter	APSytems	YC500A, YC1000-3

9. Can I simulate energy yield?

Yes, PVSYST is the industry standard software for estimating PV system energy yields. The latest version of this software includes data files (in .pan format) for the PowerXT® modules. The PowerXT® product datasheet also includes all the relevant information that a trained contractor can use to accurately estimate the energy yield of your PV system.

10. What does the PowerXT® module look like?

PowerXT® is exclusively available in a sleek, all-black construction offering an aesthetically superior alternative to traditional PV modules. Specifically, the cells, backsheet and frames are all black; there are no white areas or busbars visible on the module.

11. What do the part numbers mean?

PowerXT® is available in two formats, -PX and -BX. Both are the same dimensions and all black construction as described above. The -PX uses premium efficiency cells; these modules are best suited for applications where the highest efficiencies are important. The -BX also uses premium efficiency cells but has less available cell area on the module and therefore a slightly less power rating. Both versions offer amazing aesthetics for rooftop applications. The three digits in the part number indicate the peak power rating in watts.

12. What are the other features of PowerXT®?

The PowerXT® module utilizes more diodes and parallel cell connections than standard modules, which makes them much more tolerant of partial shading thus yielding higher energy output on typical residential applications.

13. Where can I buy PowerXT® modules?

Solaria PowerXT® modules are currently available from several distributors:

- Soligent, http://www.soligent.net/
- Fortune Energy, http://fortuneenergy.net/solaria/
- RENVU, http://www.renvu.com/SOLARIA-PowerXT-320R-BX-320W
- Solar Electric Supply, https://www.solarelectricsupply.com/solar-panel#Solaria

Due to increasing customer demand for high-efficiency modules, supplies are currently limited.

14. Can I get a loan to finance a system with Solaria modules?

Yes. Property Assessed Clean Energy (PACE) is a financing mechanism that enables low-cost, long-term funding for energy efficiency and renewable energy projects to be financed and repaid as an assessment on the homeowner's regular property tax bill. PACE financing can offer payment terms of up to 20 years with no out-of-pocket costs. Go here to learn more: http://pacenation.us/what-is-pace/

You can also contact your installer who may be able to offer additional options.