

OUR EXTREME WEATHER EQUIPMENT

STATE OF THE ART TECHNOLOGY*

Q-Cells Peak Duo™ Tier One panels

Made in the USA used in 54 countries worldwide

*Stress rated to withstand Arizona temps, 60 mph golf ball and 240 mph 1" ice pellet impact



Make yourself independent of your electricity provider. Your new solar panel supplies you with powerful solar energy—400+ watts. So you simply use self-generated electricity for your refrigerator, washing machine, lighting, pools, computers, etc. That saves money! The black on black solar panel design provides a modern look and fits ideally into virtually any architectural style. We use both centralized and micro-inverter technology.

Patented full-screen technology: no maintenance required. With conventional solar modules, dust, dirt, leaves, and rainwater often collect on the frame and block the incidence of light. This lowers the efficiency of the panel and makes regular cleaning necessary. Save yourself the trouble! Thanks to patented full-screen technology with full-surface lamination and rounded edges, the frame of your new solar panel forms a flat plane with the solar cells. Wind and rainwater flow off unhindered and wash away impurities. This way, you increase the power yield by 6–15% without any additional effort!

Note: You do not need the services of companies to clean your panels; it is unnecessary and can even void panel warranties. Because the panels in Arizona are mounted on the roof rather than the ground, any fine dust is normally blown off by the wind or washed away by the monsoons or even the infrequent rains we get. Sunlight normally penetrates fine dust with no appreciable degradation of output, as multiple studies show.

State-of-the-art half-cell technology for highest efficiency: A solar cell is divided into two half cells using modern half-cell technology. The advantage? The electrical losses are reduced, so that the performance of the solar cell and thus also that of the solar module increases. More energy compared to conventional panels.

Optimal solar power yield thanks to bypass diodes. Not every solar cell gets the same amount of sun at all times. Sometimes one is partially in the shade, and sometimes dirt and dust have accumulated on another. These cells deliver little or no power and impede the flow of electricity, which affects the overall performance of the solar panel. Thanks to bypass diodes, these obstacles are easily bypassed, and your panel continues to produce a high yield. Defects are also prevented in this way.

Solid technology for strong performance: The mono-crystalline solar module has a high efficiency and a long service life, to enjoy your power generator for decades. 25-year warranty for materials & workmanship.

EXPERT REVIEW OF QCELLS SOLAR PANELS

By Catherine Lane Updated 01/29/2024



Qcells is a Tier 1 solar panel manufacturer that makes high-performance photovoltaic (PV) and energy storage products for the residential, commercial, and industrial solar energy markets.

Its solar panels are at the top of the market for efficiency, performance, and warranty structure, and used by installers worldwide.

Qcells is one of the most popular solar brands in the U.S. If you're shopping for solar and comparing offers from solar installers and wondered if they're any good.

We think they're great. In fact, we liked them enough to crown Qcells as #1 on the SolarReviews Best Solar Manufacturers list. Qcells are high-quality, high-reliability panels sold at a good price. Qcells solar panels' quality, the company's huge investment in American manufacturing, and commitment to long-term support are all reasons we recommend Qcells modules to anyone looking for a new solar installation.

Key takeaways: Qcells is SolarReviews' #1 solar panel manufacturer in 2023.

- The company produces high-quality monocrystalline silicon solar panels for home, commercial, and industrial use, and manufactures many of its products for the U.S. market in Dalton, Georgia.
- The company's newest technology advancement is Q.ANTUM NEO, which has allowed its Q.TRON panels to reach 22.0% efficiency ratings.
- Bottom line: Qcells are among the top panels you can buy for your home, with performance, cost, and warranty that equals that of other Tier 1 solar panels.

Is it Qcells, Q CELLS, or Hanwha Q CELLS?

Qcells solar panels have a history just as long as the modern solar industry. The company has been sold and rebranded a few times since its inception and has grown from humble roots into a worldwide manufacturer.

Founded in 1999 in Thalheim, Germany, as Q CELLS AG, the company quickly grew to be one of the top solar module manufacturers in the world. Unfortunately, the late-2000s worldwide economic downturn and strong competition from government-subsidized Chinese solar panel companies took their toll, and in 2011, the company filed for insolvency. The Hanwha Group, a South Korean company with a robust solar business, purchased its assets.

In the years since, Hanwha has brought together its German engineering team and world-class manufacturing capabilities to reinvigorate the Q CELLS brand, becoming one of the world's top 10 solar module manufacturers. In 2018, Hanwha removed its name from the brand, leaving its products simply called "Q CELLS". It further streamlined the brand name in 2022, becoming the less-shouty "Qcells." However, you'd be forgiven for using any format of the brand name. Hanwha still owns the company, and even the Qcells North America website includes the old all-caps style of the name in various places.

Qcells now has manufacturing facilities worldwide, most notably its huge U.S. facility in Dalton, Georgia, the largest solar manufacturing plant in the Western Hemisphere, upon its completion in 2019. The company currently makes more solar panels in North America than any other and continues to grow its production capacity in Georgia. Any Qcells panel you buy in America is made by workers in Georgia.

Q.PEAK DUO BLK

Breaking the 21 % efficiency barrier

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 21.1 %.

A reliable investment



Inclusive 25-year product warranty and 25-year linear performance warranty¹.

Enduring high performance



Long-term yield security with Anti LeTID Technology, Anti PID Technology² and Hot-Spot Protect.

Extreme weather rating



High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).

Innovative all-weather technology



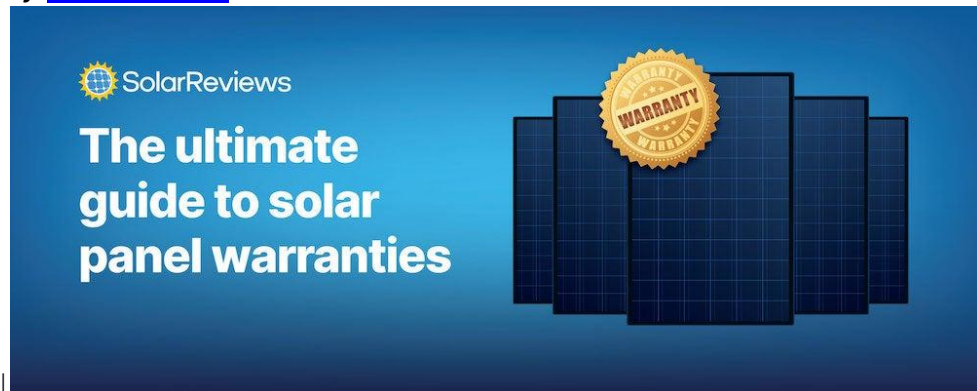
Optimal yields, whatever the weather with excellent low-light and temperature behavior.

The most thorough testing programme in the industry

Qcells is the first solar module manufacturer to pass the most comprehensive quality program in the industry:
The new "Quality Controlled PV" of the independent certification institute TÜV Rheinland.

The ultimate guide to solar panel warranties

By [Jamie Smith](#)



Solar panel warranties provide customers with a layer of protection from any errors or faulty equipment.

When you invest in a solar energy system, one of the most crucial things to consider is the warranty offer. Manufacturer warranties provide a layer of financial protection for you in the event of faulty solar equipment, performance issues, and more. Researching warranty offers can be a little confusing, and going through countless documents can become a hassle. Lucky for you, we're here to break it all down and share our top picks for the best solar panel warranties on the market today!

What is a solar panel warranty?

A solar panel warranty is a guarantee that a company or manufacturer gives to the customer, promising coverage for their products and how well they are expected to perform.

Any reputable solar panel manufacturer will offer two warranties: a product warranty and a performance warranty. These cover manufacturing faults and guarantee a certain level of performance for your panels.

Product and performance are the two basic warranties to watch when researching solar panel brands to invest in. However, some manufacturers go above and beyond and offer additional protection for things like installation, labor, and additional parts. These warranties are usually offered by manufacturers with certified installer programs, like Our World Energy.

What's the difference between product and performance warranties?

So, how can you decipher between product and performance warranties?

It's simple: product warranties cover the panels themselves (and sometimes other equipment, too!), while performance is more or less a promise that your panels will perform at a certain percentage over their lifespan.

Product warranty

Also known as an equipment or materials warranty, a product warranty protects you from any defects your solar equipment has that could have stemmed from workmanship errors during manufacturing or poor material quality. **It's becoming increasingly common for premium panels to offer 20 or 25-year product warranties.**

It's not very common, but it is definitely possible for your equipment to malfunction.

Product warranties typically don't cover the costs of diagnosing issues with panels – they cover the cost of repairing or replacing them if the issue is found to be linked to the manufacturer. These warranties don't typically last as long as performance warranties – likely because trained installers should catch any imperfections right away.

For example, if you're a homeowner getting panels installed and your installer notices a panel not functioning properly, the manufacturer will cover the costs to fix or replace it. Solar systems can be pricey, so being protected from putting forth even more money in the event of a faulty panel is always a bonus. Luckily, most, if not all, solar panel manufacturers offer a product warranty, so you can sleep better at night knowing you're covered!

Product warranties are not installer workmanship warranties

Product warranties cover issues that happen during manufacturing. Issues from the actual installation would be covered by a warranty provided by the solar installer.

Performance warranty

Performance warranties guarantee a percentage of electric power output over the warranty period. Most solar manufacturers offer 25-year performance warranties. The amount of power your solar panel can output declines steadily over that period.

While [solar panel degradation](#) is normal, be sure to read over your panel's [specification sheet](#) or warranty terms for specifics.

The average solar panel performance warranty will guarantee a panel's power output won't drop by more than 1% after the first year and no more than 0.5% each year after that for the remainder of the warranty period.

Degradation rates vary based on the manufacturer.

The lower the degradation rate, the better.

As a rule, stick with panels with a degradation rate in the 0.5% range or lower such as Qcells. This means you have panels that will produce more energy over its lifespan.

Remember that just because your panel isn't operating at its full wattage doesn't necessarily mean it's damaged.

The performance warranty for solar panels is based on the panel's operation under [Standard Test Conditions](#). So, don't panic if you notice slight under performance at first.

There are a few different factors that go into how well a panel performs!

Why are solar panel warranties important?

Warranties are a signal of quality in a product. Companies offer better warranties for products that are better quality.

Solar panel failure is extremely rare, as they are explicitly designed to last decades and withstand harsh weather conditions.

That being said, errors can occur. **Warranties give customers peace of mind that the products are of the best quality and don't contain any defects.**

If this happens to you, it's always good to have coverage on a big investment like solar panels! If your system has a problem, it's nice to know there may be a way to find a solution.

Qcells have a full 25-year warranty on workmanship and production

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SCAN QR CODE
View our Solar Programs



Business ID: 1000036348

BBB Rating: A+



Free Appointment



Use this QR code or go to our website
Use the 'Get a FREE Quote' link.
Fill out the 1 minute form.
We will contact you and start
you on your solar journey.