

## REC N-PEAK: EXPLAINED

## PREMIUM N-TYPE MONO SOLAR PANELS USING HALF-CUT CELL TECHNOLOGY FROM THE LARGEST EUROPEAN BRAND

The REC N-Peak features innovative cell technology and a robust frame design for higher efficiency and higher power output:

- More power for more electricity generation
- Higher yields through improved
  performance in shaded conditions
- Proven reliability of an established European brand



MONO N-TYPE: THE MOST EFFICIENT C-SI TECHNOLOGY



SUPER-STRONG FRAME UP TO 7000 PA SNOW LOAD



IMPROVED PERFORMANCE IN SHADED CONDITIONS



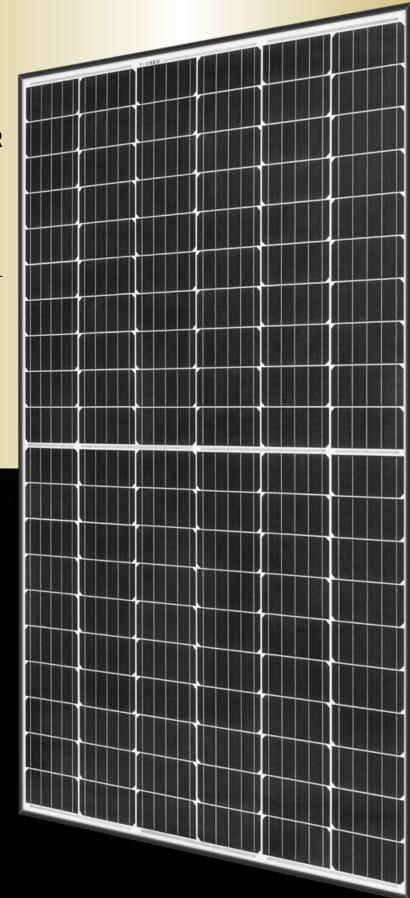
NO LIGHT INDUCED DEGRADATION



FLEXIBLE INSTALLATION OPTIONS



GUARANTEED HIGH POWER OVER LIFETIME



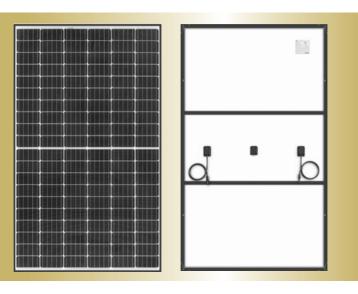
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#### REC's most powerful solar panel ever!

Providing customers with up to 330 Wp in a 60-cell panel, the new REC N-Peak panel uses the most efficient cell technology in the industry, capturing more sunlight thereby providing more power.

The REC N-Peak Series is ideal for residential and smaller commercial and industrial rooftops where as much power as possible needs to be packed in to a limited space and where higher power levels need to be achieved with fewer modules. The unique REC 'Twin' cell layout design, where the panel is split into two identical and mirrored sections, also enables the continued production of energy, even when part of the module or array is shaded, further contributing to its high energy yields compared to standard panels.





#### Zero LID:

The loss of power generation capacity seen in a standard solar panel on its first exposure to light is known as Light Induced Degradation (LID). This is a result of the reaction of boron and oxygen inside a cell and causes a permanent drop in a standard panel's maximum power.

Not with the REC N-Peak Series, however! Through the use of n-type technology, REC's N-Peak cells avoid a reaction between boron and oxygen at all levels and therefore any occurrence of LID can be fully prevented.

This ensures the power of the panel remains the same as when it left the REC factory, meaning customers always get exactly the power levels that they paid for.

#### Advantages of REC's n-type mono cells:

Based on high efficiency monocrystalline cell technology, the REC N-Peak boosts panel efficiency through n-type and PERT technologies:

- With n-type cell technology, the internal construction of a cell reduces Light Induced Degradation (LID) to zero, meaning no power loss right after installation
- PERT technology completely passivates the rear of the cell for increased electron capture and high and stabilized efficiency
- Class-leading temperature performance keeps panels cooler for increased efficiency and higher yields
- All round higher yields at higher wavelengths, with strong performance from dawn through to dusk

Combining n-type and PERT technology in the REC N-Peak Series has created a high efficency and powerful solar panel, that helps you make the most of every installation, especially where space is limited.



#### Super-strong frame design:

Introducing a new frame design with extra support bars across the rear of the panel, the REC N-Peak reduces the bending and deformation of the panel under load while allowing loads of up to 7000 Pa, far exceeding the 5400 Pa offered by conventional panels. Such an increase in panel strength and durability enables customers to achieve much higher energy yields over the total lifetime of the installation.

The new 30 mm frame height allows the optimization of packaging and transportation to reduce the amount of transport and trucks on the road, keeping the product's and users' carbon footprint low. Together, this new frame design enables flexible installation options, making overcoming every obstacle easier during system design.

#### **REC's leading warranty:**

All of the advantages of the REC N-Peak combine to guarantee customers high power output over its warranted lifetime:

- 20 year product warranty
- 25 year linear power output warranty
- Maximum degradation of 0.5% per year
- 86% of power rating warranted after 25 years





REC

# LOWEST CLAIMS LEADING WARRANTY

The lowest warranty claims rate in the industry justifies leading warranty terms.

While the best warranty is one that customers never need to call on, REC products are the closest to this utopia in the solar industry, boasting the lowest claims rate: from more than 4 million REC solar panels manufactured each year, less than 400 return from the field. The warranties for REC panels reflect this leadership, further supporting REC's premium quality.

20 YEAR PRODUCT WARRANTY



Comprehensive premium warranties that provide long-term and value-adding security you can depend on – from the largest European brand of solar panels!

### **PRODUCT WARRANTY:**

All products come standard with a **20-year product warranty**. This promises that the workmanship and materials of the panels themselves maintain their superior quality for at least 20 years.

For all REC TwinPeak products, that's double the previous product warranty duration, and an extra 8 years for the REC N-Peak Series.

In addition, all products are eligible for a **+5 year product warranty extension**, when installed by a certified REC Solar Professional installer.

### **POWER OUTPUT WARRANTY:**

The power output warranty for all products is **linear for 25 years**. This ensures that REC solar panels will perform exactly as they are expected to – every year for 25 years – providing greater ROI predictability.

The **REC N-Peak Series**' power output warranty remains REC's best thanks to the minimized degradation enabled by REC's unique cell production process.

**REC TwinPeak 2** panels (including **BLK2** and **Mono** variants) have the same power output warranty: higher warranted power in year 1 and thus, higher year-over-year yields.

Similarly, **REC TwinPeak 2S 72** and **REC TwinPeak 2S Mono 72** panels have a matching warranty. With higher warranted power in year 1 and lower annual degradation, these 72-cell panels are guaranteed to produce at least 85.5% of its nameplate power after 25 years of operation.

The table below provides an overview of REC warranties by product Series, **applicable to REC panels delivered to REC customers on or after October 1, 2018**:

Product Series	PRODUCT WARRANTY		POWER OUTPUT WARRANTY		
	Product warranty	Extension eligibility*	Minimum power in year 1	Year 2-25 warranted annual degradation	% of nameplate power after year 25
REC N-Peak	20 years	+5 years	98.0%	0.5%	86.0%
REC TwinPeak 2 Mono REC TwinPeak 2	20 years	+5 years	97.5%	0.7%	80.7%
REC TwinPeak 2S Mono 72 REC TwinPeak 2S 72	20 years	+5 years	97.5%	0.5%	85.5%

\*Product Warranty extension eligibility is exclusive to certified REC Solar Professional installers .

Visit the REC Download Center for details of each product's warranty conditions: www.recgroup.com/warranty

Founded in Norway in 1996, REC is a leading vertically integrated solar energy company. Through integrated manufacturing from silicon to wafers, cells, high-quality panels and extending to solar solutions, REC provides the world with a reliable source of clean energy. REC's renowned product quality is supported by the lowest warranty claims rate in the industry. REC is a Bluestar Elkem company with headquarters in Norway and operational headquarters in Singapore. REC employs2,000 employees worldwide, producing 1.5 GW of solar panels annually.

