

Innovation for a Better Life

LG SOLAR

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<http://lg-solar.com>

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* The contents can be changed without notice.

2018 PRODUCT CATALOG

Technological innovation is paramount for the growth of sustainable renewable energy.

The advancement of solar technology and affordability, combined with increasing public interest and support, has led to exponential growth for the industry. Because photovoltaic (PV) modules have an average lifespan of 25 years, choosing a well-built product from a trusted brand is important. Through 30 years of diligent solar research and development, LG continuously leads the industry with PV modules that are unparalleled in quality and performance. Thanks to the stability and reputation of its veteran brand, LG is a reliable partner to our solar customers.



Innovation for a Better Life
Best Partner for Your Life

LG SOLAR

Contents

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- Leading Technology
- Quality

LG NeON® Series

- LG NeON® R
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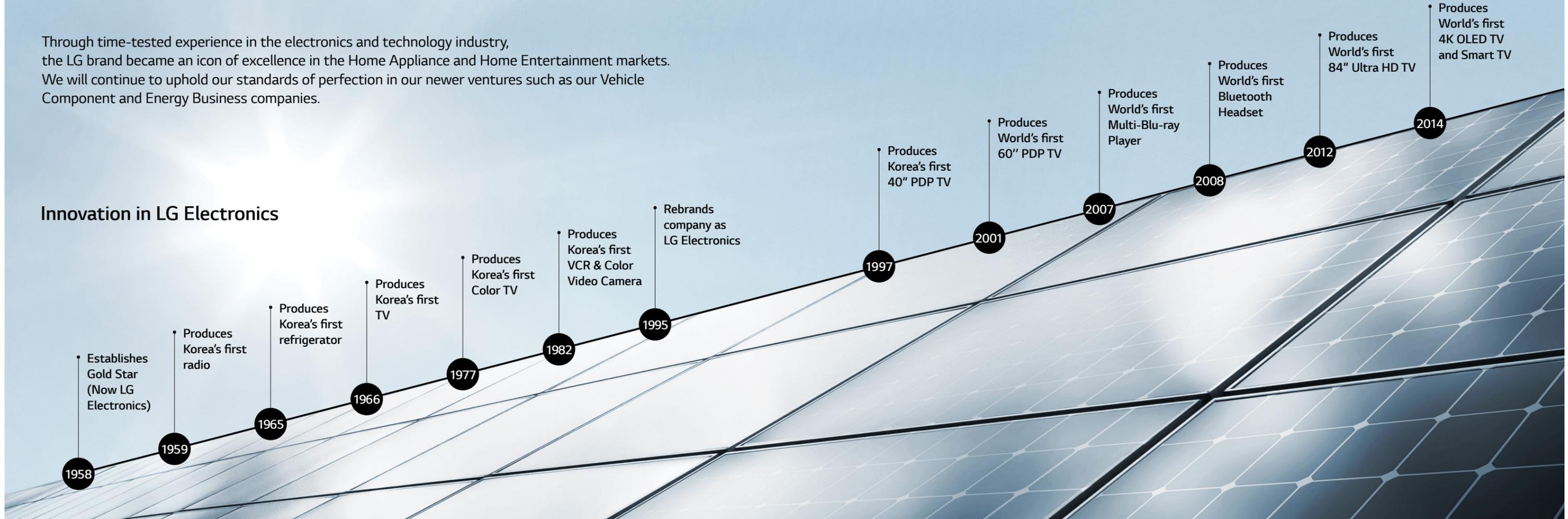
Reference

Contact Us

BRAND POWER

Through time-tested experience in the electronics and technology industry, the LG brand became an icon of excellence in the Home Appliance and Home Entertainment markets. We will continue to uphold our standards of perfection in our newer ventures such as our Vehicle Component and Energy Business companies.

Innovation in LG Electronics



LG Electronics plays an active role in world markets with its assertive global business policy. As a result, LG Electronics controls 118 local subsidiaries worldwide, with roughly 75,150 executives and employees.



REVENUE	Workforce	World Presence
\$55.4 billion(2017)	75,150	118 Global Operations

* LGE consolidated basis, Exchange Rate KRW 1,108.51 per USD

LG Smart Energy Solutions

LG has developed a complete energy management system that integrates solar energy production, storage, and control that can be integrated with LG high efficiency appliances.

SOLAR

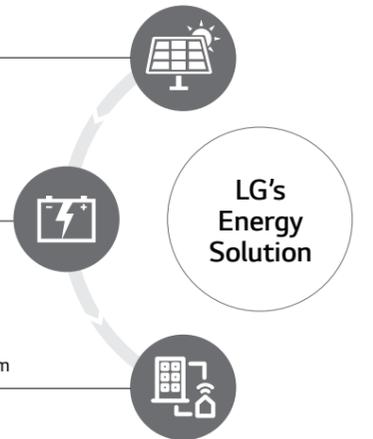
High efficiency module that generates more energy

ESS Energy Storage System

Stable electricity flow with high system efficiency

EMS Energy Management System

Ultimate building control and energy management solution

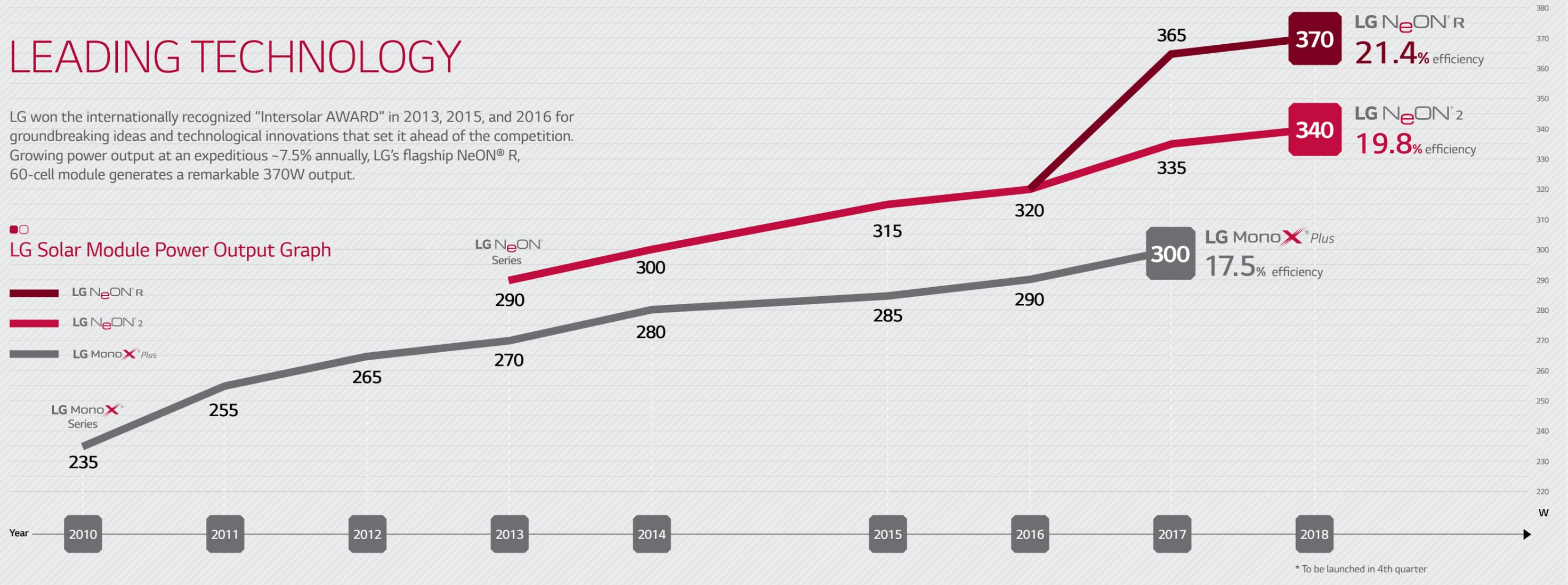


LEADING TECHNOLOGY

LG won the internationally recognized "Intersolar AWARD" in 2013, 2015, and 2016 for groundbreaking ideas and technological innovations that set it ahead of the competition. Growing power output at an expeditious ~7.5% annually, LG's flagship NeON® R, 60-cell module generates a remarkable 370W output.

LG Solar Module Power Output Graph

- LG NeON® R
- LG NeON® 2
- LG MonoX® Plus



LG Solar Awards & Innovation in Technology

2013

Intersolar Award 2013 [Winner]

Plus X Award 2013 [High Quality, Ecology]

N-type Cell

N-type cells convert sunlight into energy more efficiently than P-type cells. Additionally, the rear side of the cell also generates energy

2015

Intersolar Award 2015 [Winner]

EUPD Research Top Brand [Module] 2015

Plus X Award 2015 [High Quality, Functionality, Ecology]

Cello Technology™

Cello technology™ uses 12 wires compared to 4 ribbons allowing for a higher current distribution. Cello's cylindrical wiring scatters the light at various angles more efficiently than conventional flat wiring.

12 Wires
LG NeON® 2

4 busbar
4 Ribbons Product

2016 / 2017

Intersolar Award 2016 [Winner]

EUPD Research Top Brand [Module] 2016

EUPD Research Top Brand [Module] 2017

Bifacial Product

NeON® 2 BiFacial is capable of generating energy from the Modules. front and rear sides allowing up to 30% more energy generation than standard PV Modules.

LG NeON® 2 BiFacial

+ 5~30%

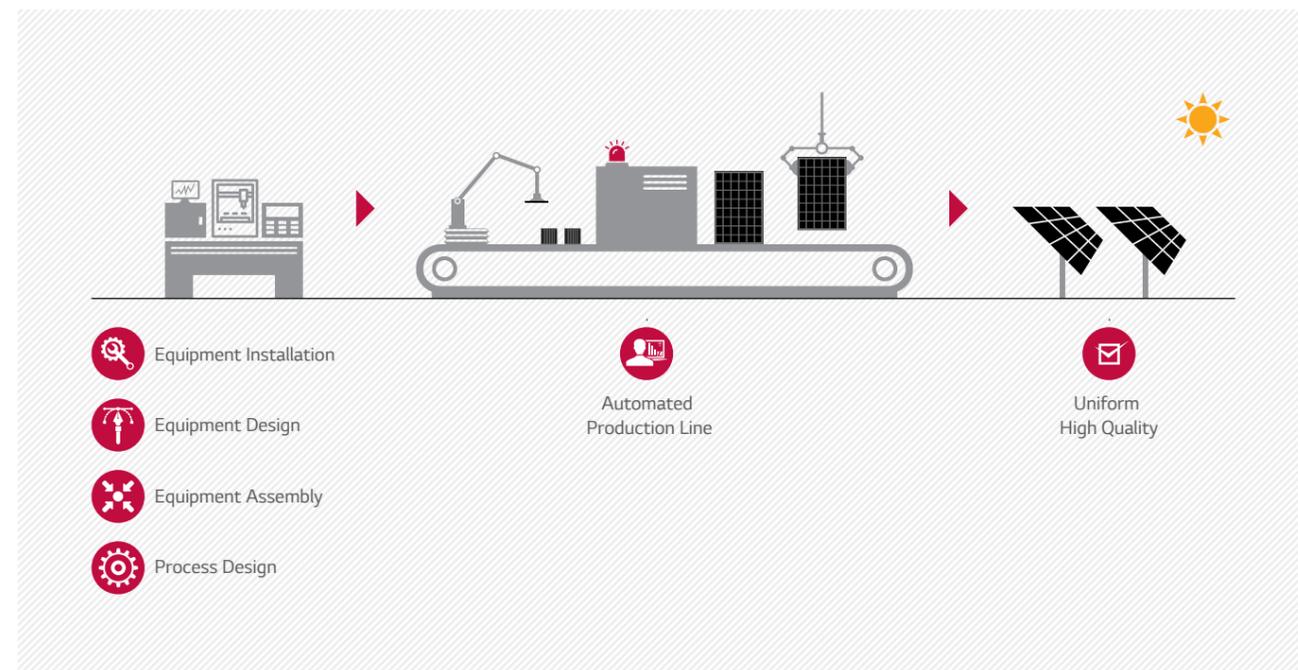
Monofacial Product

QUALITY

LG has always built innovative, high quality products, and LG modules uphold the same standards. LG PV modules remain robust and efficient in environments with high temperatures or low irradiance. This, combined with a low annual degradation and longer warranty than the market average, ensures LG quality and consumer confidence.

Operational Excellence & Testing Facilities

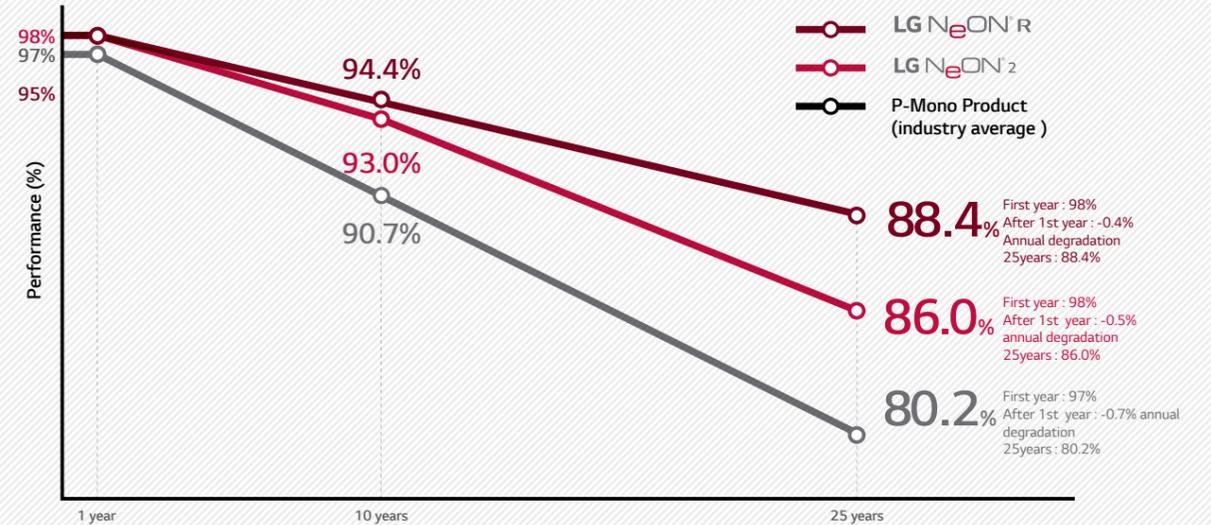
LG PV modules are built on an automated production line in order to maintain the utmost precision and quality, and LG is the first corporation in the world to operate in-house solar testing facilities that are certified by the 4 major inspection and certification authorities.



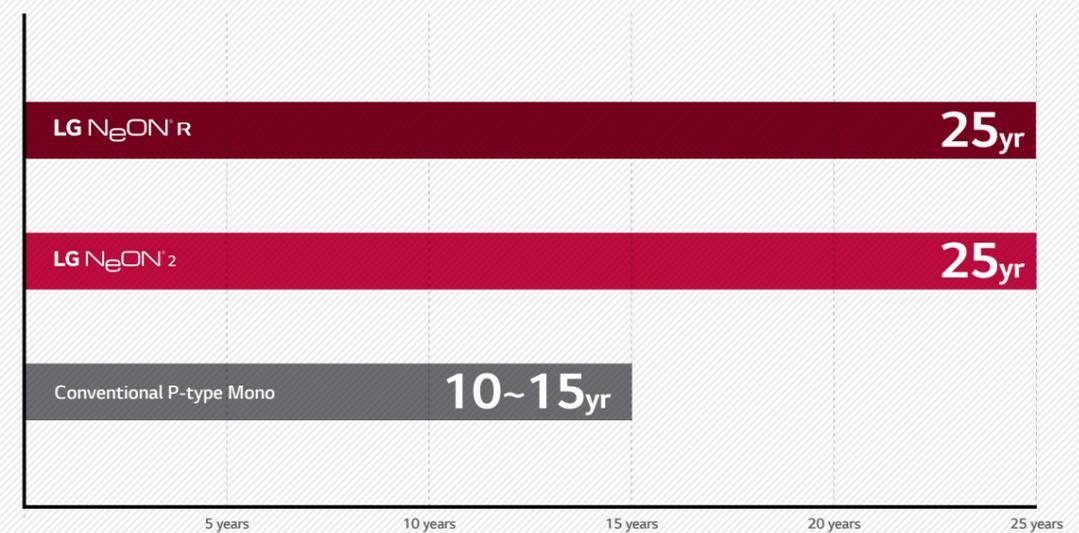
Superior Performance Warranty

LG offers an industry top-level warranty on output and product, providing customers with peace of mind when generating electricity.

Output Warranty



Product Warranty

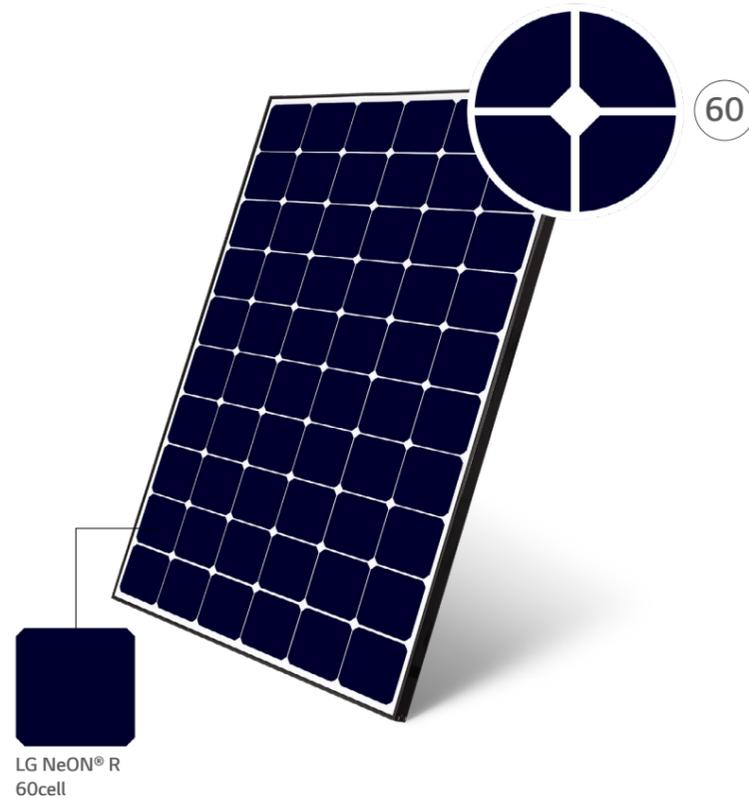


LG NeON® R



The Apex of Solar Generation

The LG NeON® R is LG's premier module armed with the highest and most efficient energy generation technology that LG has ever produced. LG NeON® R not only generates the most energy from LG's lineup but is also the most stable in all environmental conditions.



Technical Data

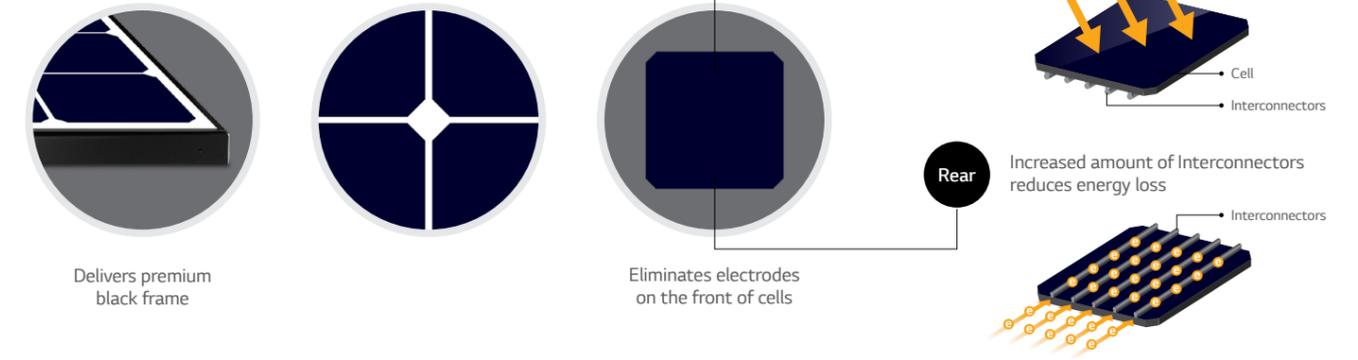
Product Model	LG NeON® R 60cell		
Cell Type	Monocrystalline / N-type		
# of Cells	60cell (6 x 10)		
Maximum Power	370W	365W	360W
Module Efficiency	21.4%	21.1%	20.8%
Dimensions (L x W x H)	1,700 x 1,016 x 40 mm		
Weight	18.5kg		
Output Warranty of Pmax	Linear Warranty First year : 98%, After 1 st year : 0.4% annual degradation, 25years : 88.4%		
Product Warranty	25years		



Features

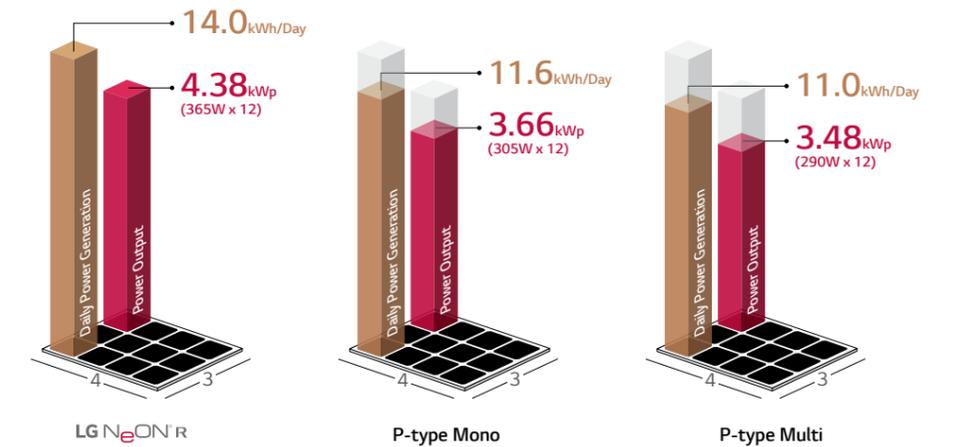
Technical Feature

The LG NeON® R is a sleek module that eliminates metal electrodes on the front side. The module's environmental and aesthetic design is ideal for roofs, offering a clean, sleek modern exterior and increasing the home's value.



High Power Generation

The LG NeON® R is a high efficiency module that generates more energy than a conventional module. Less modules are needed to achieve energy requirements, allowing consumers flexibility in system design.

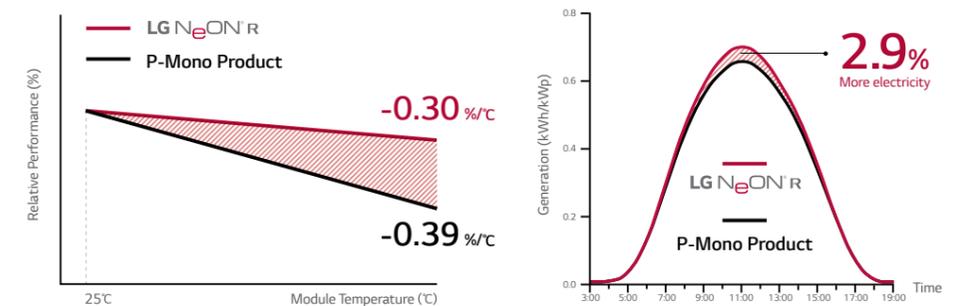


* PV Syst simulation result
* Region : Bayern München, Germany
* Data source : Pan file, Datasheet

Power Output Comparison of 12-module arrays

High Temperature Stability

The LG NeON® R generates 2.9% more energy than conventional P-type mono modules in high temperature conditions.



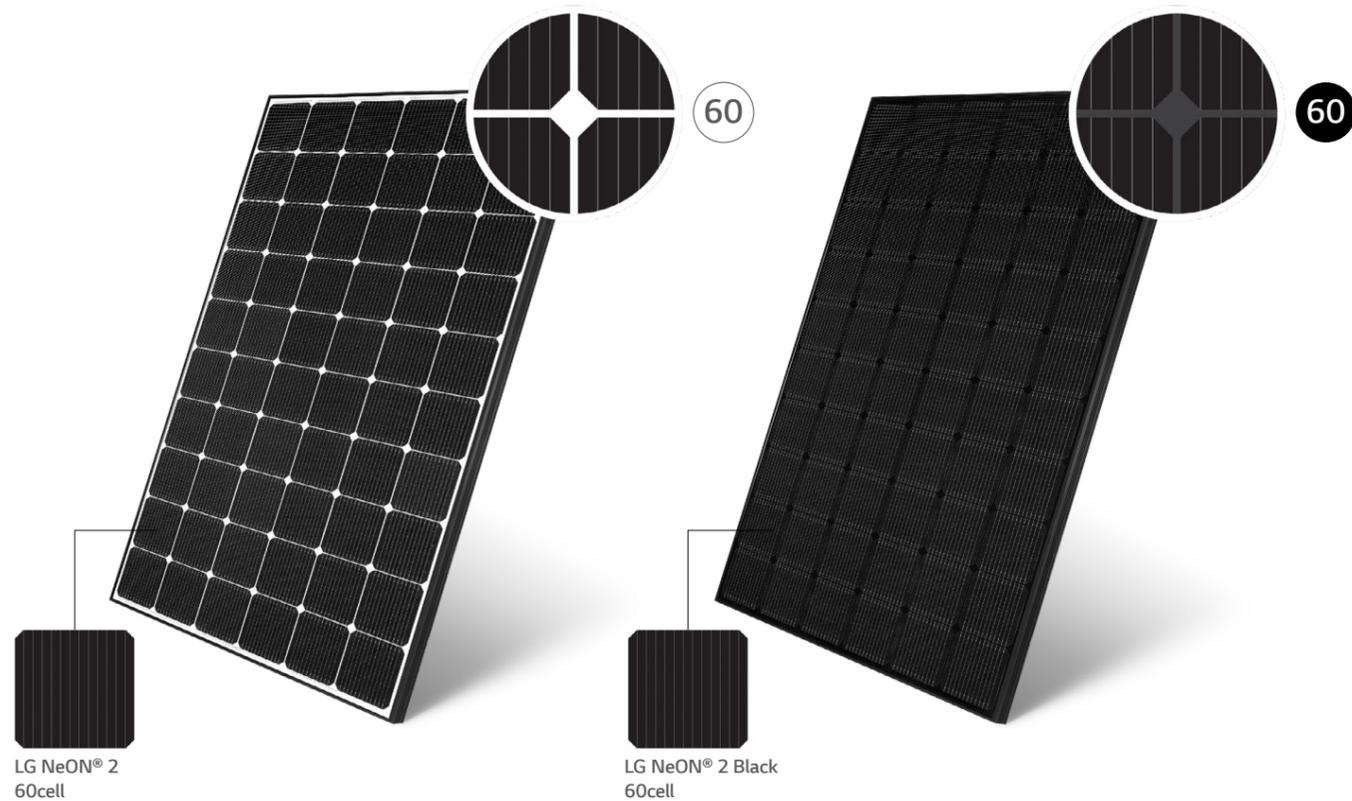
* PV Syst simulation result
* Region : Bayern München, Germany
* One day in July (Highest temperature in a day : 32°C)
* Data source : Pan file, Datasheet

LG NeON[®] 2 | LG NeON[®] 2 Black



LG's Best-selling Module

The LG NeON[®] 2 is LG's best-selling solar module. It received the acclaimed 2015 Intersolar AWARD for featuring LG's Cello Technology[™] which increases its power output and reliability making it one of the most powerful and versatile modules on the market.



LG NeON[®] 2
60cell

LG NeON[®] 2 Black
60cell



Technical Data

Product Model	LG NeON [®] 2 60cell	LG NeON [®] 2 Black 60cell
Cell Type	Monocrystalline / N-type	
# of Cells	60cell (6 x 10)	
Maximum Power	340W	320W
Module Efficiency	19.8%	18.7%
Dimensions (L x W x H)	1,686 x 1,016 x 40 mm	
Weight	18kg	
Output Warranty of Pmax	Linear Warranty (First year : 98%, After 1st year : 0.5% annual degradation, 25years : 86%)	
Product Warranty	25years	

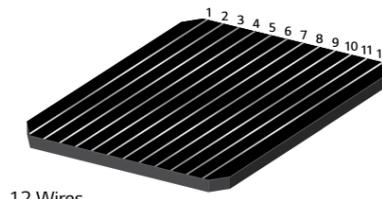


Features

Technical Feature

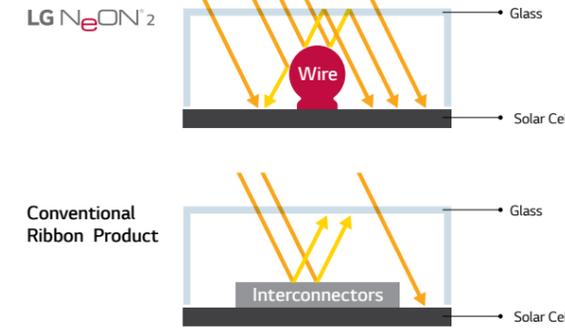


Cello Technology[™]

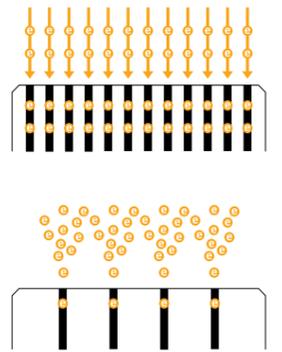


12 Wires

Increased Light Absorption

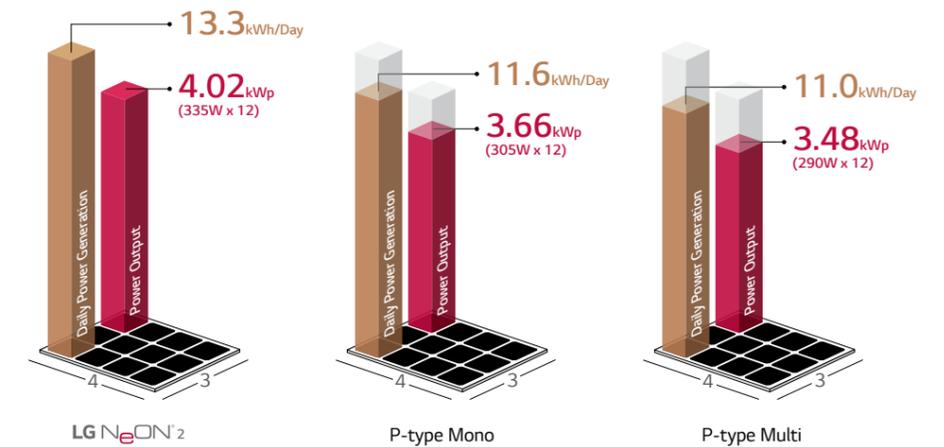


Reduced Electricity Loss



High Power Module

The LG NeON[®] 2 produces more energy than conventional modules allowing energy requirements to be met using less space.



* PV Syst simulation result
* Region : Bayern München, Germany
* Data source : Pan file, Datasheet

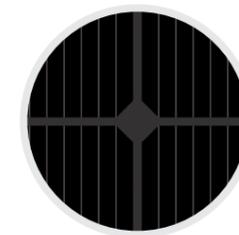
Power Output Comparison of 12-module arrays

Aesthetic Black module

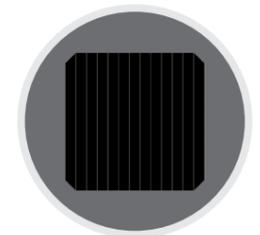
The LG NeON[®] 2 black is equipped with a sophisticated matte black frame and a complementary black back sheet, and black cells with thin electrodes. This module is perfectly suited to any rooftop.



Matte Black Frame



Black Back sheet



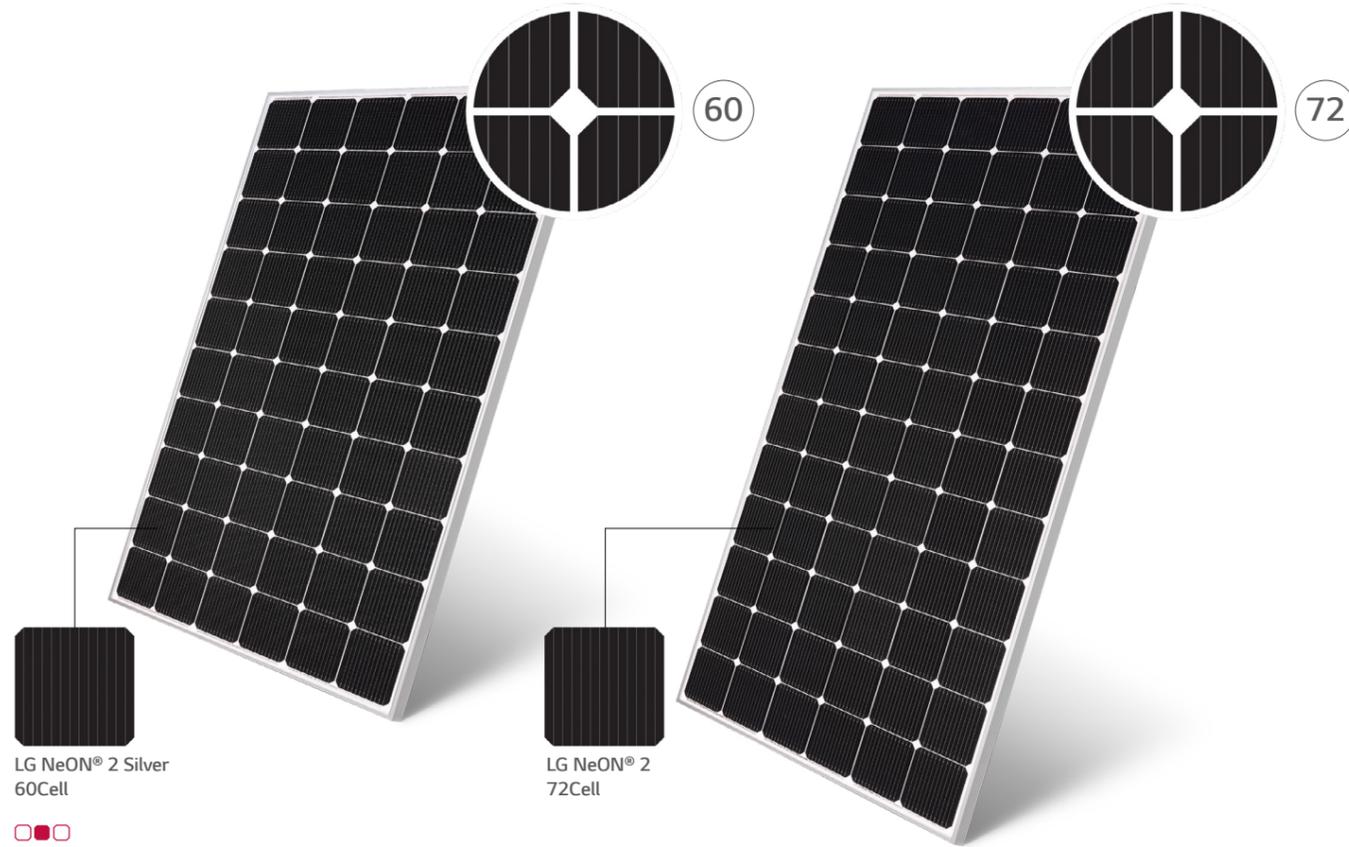
Black Cell with Cello Technology

LG NeON[®] 2



LG's Best-selling Module

The LG NeON[®] 2 is LG's best-selling solar module. It received the acclaimed 2015 Intersolar AWARD for featuring LG's Cello Technology™ which increases its power output and reliability making it one of the most powerful and versatile modules on the market.



LG NeON[®] 2 Silver 60Cell

LG NeON[®] 2 72Cell



Technical Data

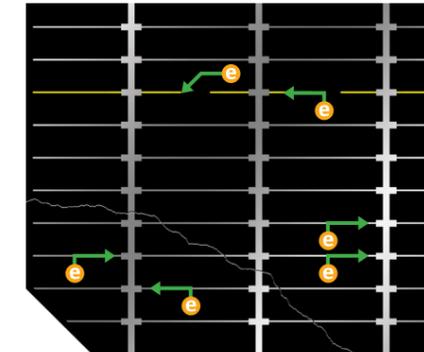
Product Model	LG NeON [®] 2 Silver 60Cell		LG NeON [®] 2 72Cell	
Cell Type	Monocrystalline / N-type		Monocrystalline / N-type	
# of Cells	60cell (6 x 10)		72cell (6 x 12)	
Maximum Power	335W	330W	400W	395W
Module Efficiency	19.6%	19.3%	19.3%	19.1%
Dimensions (L x W x H)	1,686 x 1,016 x 40 mm		2,024 x 1,024 x 40 mm	
Weight	18kg		21.7kg	
Output Warranty of Pmax	Linear Warranty (First year : 98%, After 1st year : 0.5% annual degradation, 25years : 86%)			
Product Warranty	25years			



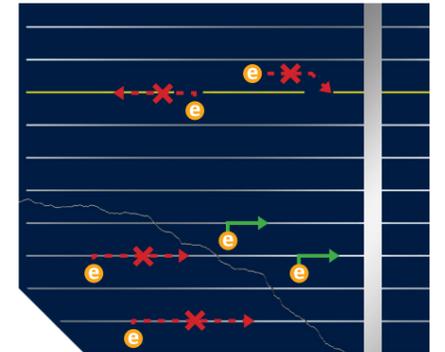
Features

Enhanced Long-term Reliability

When micro-cracks or finger electrode erosion occurs due to outside factors, LG NeON[®] 2 reduces down performance by blocking the electrical path due to the layout of wires.



Multiple electrical paths maintained by wires

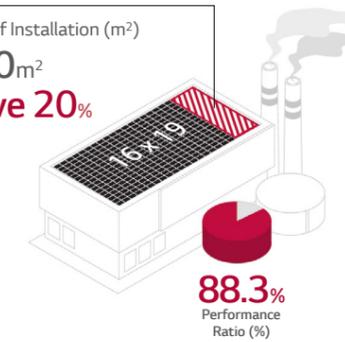


High Power Module

The LG NeON[®] 2 produces more energy than Conventional P-type Multi modules allowing energy requirements to be met using less space.

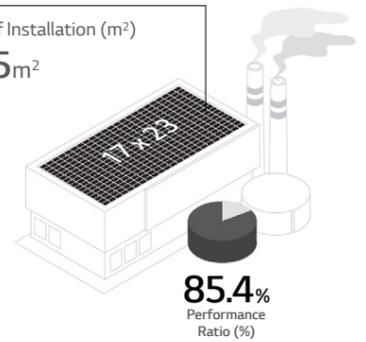
LG NeON[®] 2 (335W)

Area of Installation (m²)
780m²
Save 20%



P-type Multi (260W)

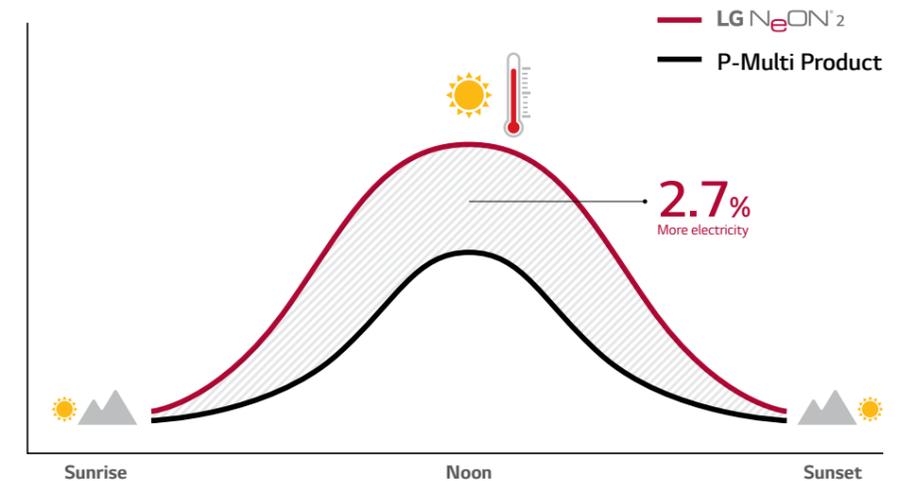
Area of Installation (m²)
975m²



* PV Syst simulation result
* Region : Bayern München, Germany
* Data source : Pan file, Datasheet
* Pitch : 5.5m
* The distance between modules in an array : 20mm

Strong Performance in Diverse Environments

The LG NeON[®] 2 generates 2.7% more energy than P-type Multi modules in high temperature conditions as well as in low irradiation conditions.



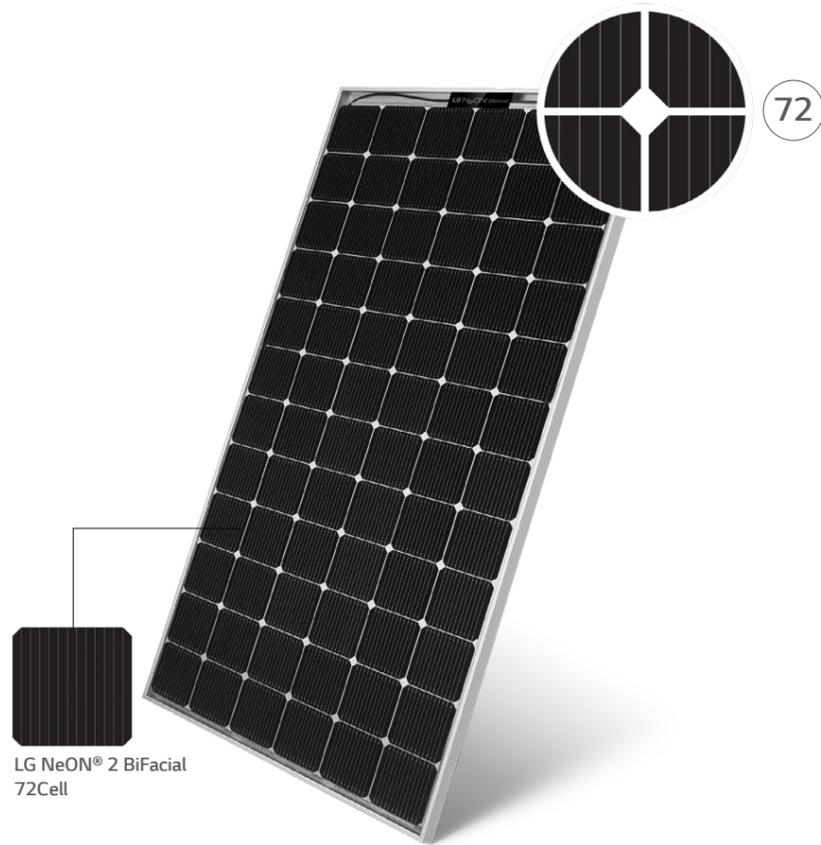
* PV Syst simulation result
* Region : Bayern München, Germany
* One day in July(Highest temperature in a day : 32°C)
* Data source : Pan file, Datasheet

LG NeON[®] 2 BiFacial

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Double-sided Generation At Its Best

The LG NeON[®] 2 BiFacial is designed to absorb irradiance not only from the front, but also the rear of its NeON[®] cell by using a transparent back sheet. The dual faces of the cell allow for higher energy generation.



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Technical Data

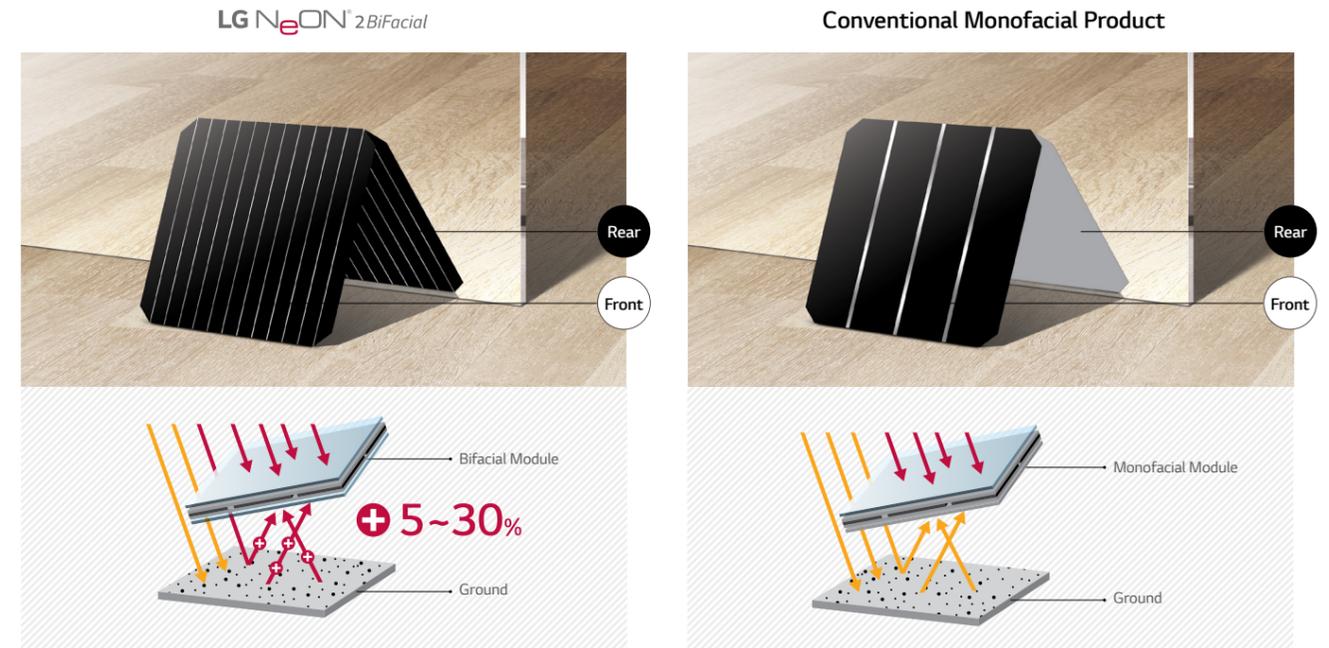
Product Model	LG NeON [®] 2 BiFacial	
Cell Type	Monocrystalline / N-type	
# of Cells	72cell (6 x 12)	
Maximum Power	395W	390W
Module Efficiency	18.7%	18.5%
Dimensions (L x W x H)	2,064 x 1,024 x 40 mm	
Weight	22.1kg	
Output Warranty of Pmax	Linear Warranty (First year : 98%, After 1st year : 0.5% annual degradation, 25years : 86%)	
Product Warranty	25years	

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Features

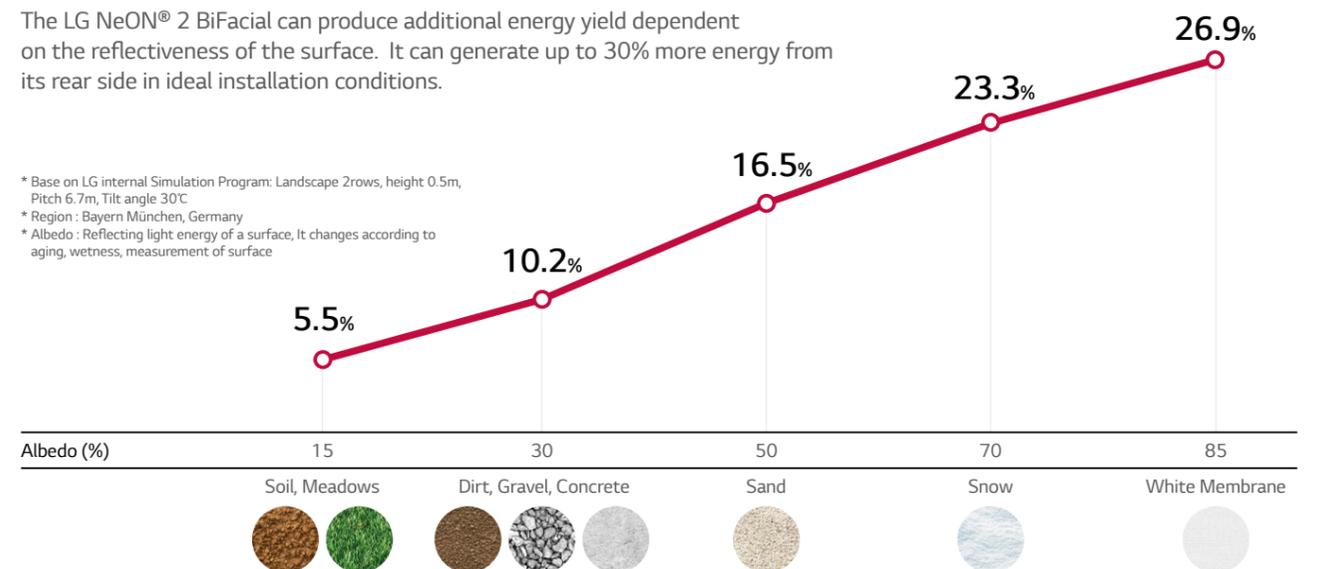
N-type Cell (double-sided generation cell structure)

Using a NeON[®] cell which can generate energy on both sides, LG developed the optimized module for bifacial generation.



Additional Energy Yield Based on Ground Type

The LG NeON[®] 2 BiFacial can produce additional energy yield dependent on the reflectiveness of the surface. It can generate up to 30% more energy from its rear side in ideal installation conditions.



* Base on LG internal Simulation Program: Landscape 2rows, height 0.5m, Pitch 6.7m, Tilt angle 30°
 * Region : Bayern München, Germany
 * Albedo : Reflecting light energy of a surface. It changes according to aging, wetness, measurement of surface

REFERENCE

Residential



USA



Thailand_Bangkok



Netherland_Venlo



Thailand_Bangkok



Germany_Leipzig



Germany_Grasberg



Switzerland_Kollikon

REFERENCE

Commercial

Utility



Thailand_Bangkok



USA_Easton



Australia_Sydney



Korea_Sejong



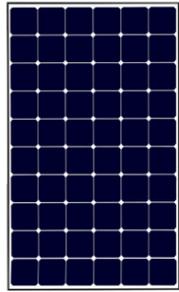
Japan_Hokkaido



Japan_Aomori

PRODUCT LINE-UP

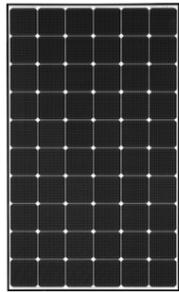
LG NeON[®]R



370W
365W
360W

LG NeON[®]R
60Cell

LG NeON[®]2



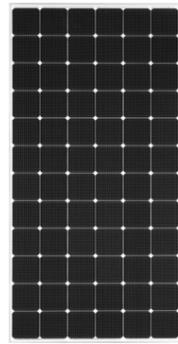
340W
335W
330W

LG NeON[®]2
60Cell



320W

LG NeON[®]2 Black
60Cell



400W
395W

LG NeON[®]2 72Cell

LG NeON[®]2 BiFacial



395W
390W

LG NeON[®]2 BiFacial
72Cell

LG Solar Is Your Best Partner

LG Solar has conducted continued solar energy research for the last 30 years. By synergizing this research with more than 50 years of experience and knowhow in the electronics industry, LG has developed a premium solar module product line that offers long-term quality assurance and high energy output capacity.

LG Solar continues to seek new challenges even today. Rather than settling for its successes up to this point, LG Solar will continue its genuine and relentless pursuit of value to satisfy its customers.

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