LG | Solar

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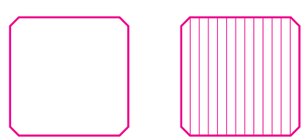
CT-ET-GL-EN-F-80525



Innovation for a Better Life

LG SOLAR

2018 PRODUCT CATALOG

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

Because photovoltaic (PV) modules are a long-term investment for any homeowner, choosing a well-built product from a trusted brand is important. Thanks to 30 years of diligent solar research and development, LG is able to provide PV modules that are unparalleled in quality and performance. In addition, our global reputation as a stable, reliable brand provides our customers with peace of mind.

Innovation for a Better Life

LG SOLAR

Contents

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

- 1958 — Establishes Gold Star (Now LG Electronics)
- 1959 — Produces Korea's first radio
- 1965 — Produces Korea's first refrigerator
- 1966 — Produces Korea's first TV
- 1977 — Produces Korea's first Color TV
- 1982 — Produces Korea's first VCR & Color Video Camera
- 1995 — Rebrands company as LG Electronics
- 1997 — Produces Korea's first 40" PDP TV
- 2001 — Produces World's first 60" PDP TV
- 2007 — Produces World's first Multi-Blu-ray Player
- 2008 — Produces World's first Bluetooth Headset
- 2012 — Produces World's first 84" Ultra HD TV
- 2014 — Produces World's first 4K OLED TV and Smart TV

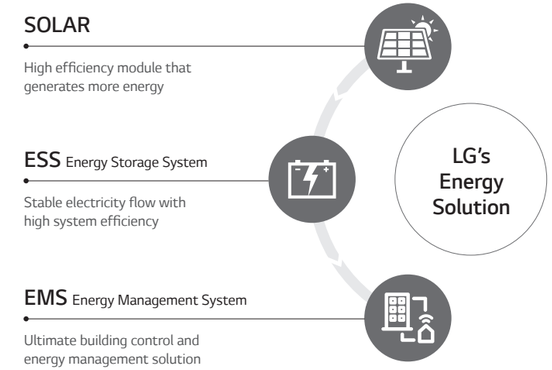
LG Electronics controls 118 local subsidiaries worldwide,
with roughly 75,150 executives and employees.

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

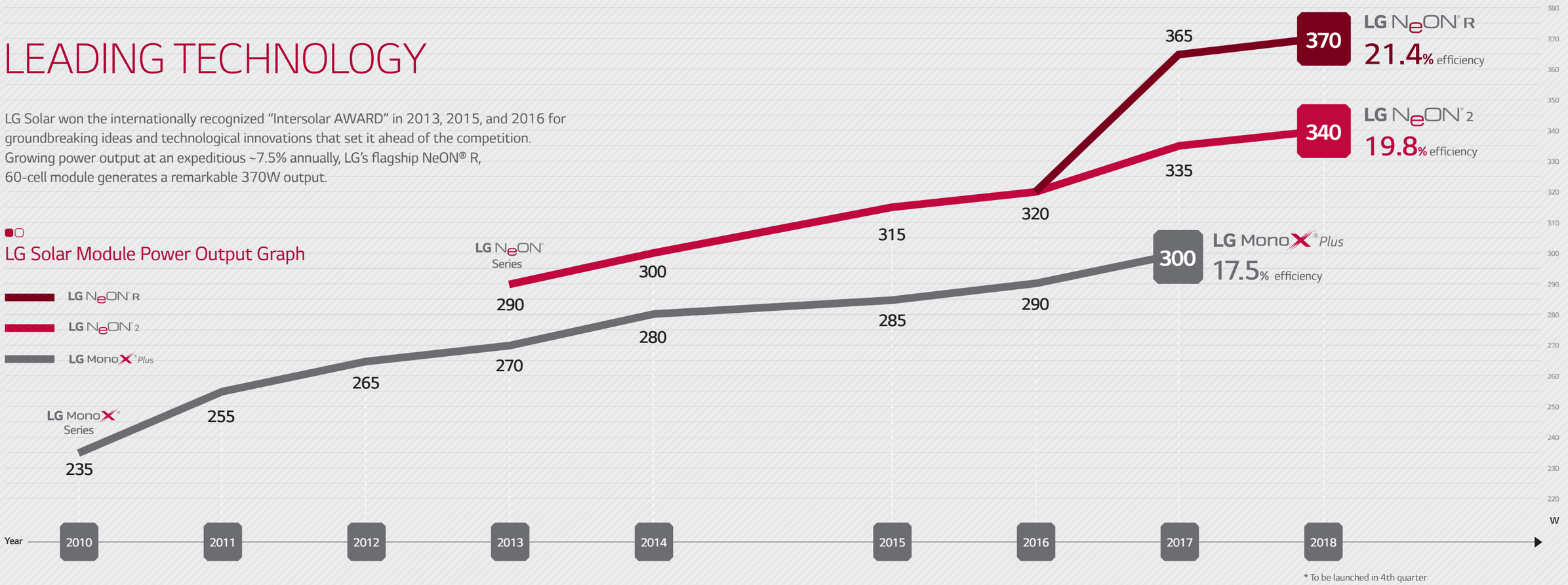
LG has developed a complete energy management system that integrates solar energy production, storage, and control that can be integrated with LG high efficiency appliances.



LEADING TECHNOLOGY

LG Solar 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



* To be launched in 4th quarter

LG Solar Awards & Innovation in Technology

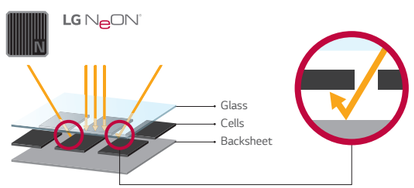
2013

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

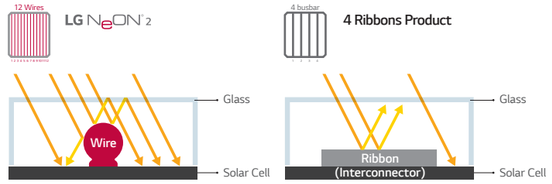
Intersolar Award 2015 [Winner]

EUPD Reasearch 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.



2016 / 2017

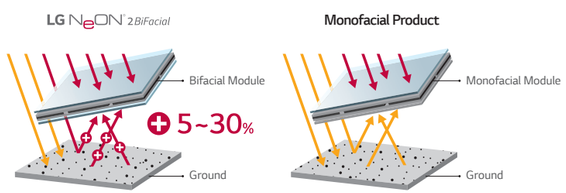
Intersolar Award 2016 [Winner]

EUPD Reasearch Top Brand [Module] 2016

EUPD Reasearch 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.

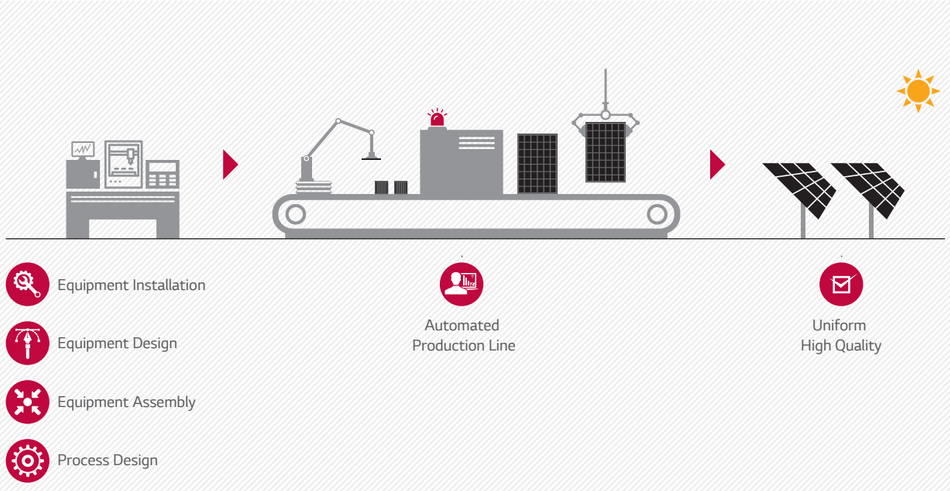


QUALITY

LG has always built innovative, high quality products, and LG Solar 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

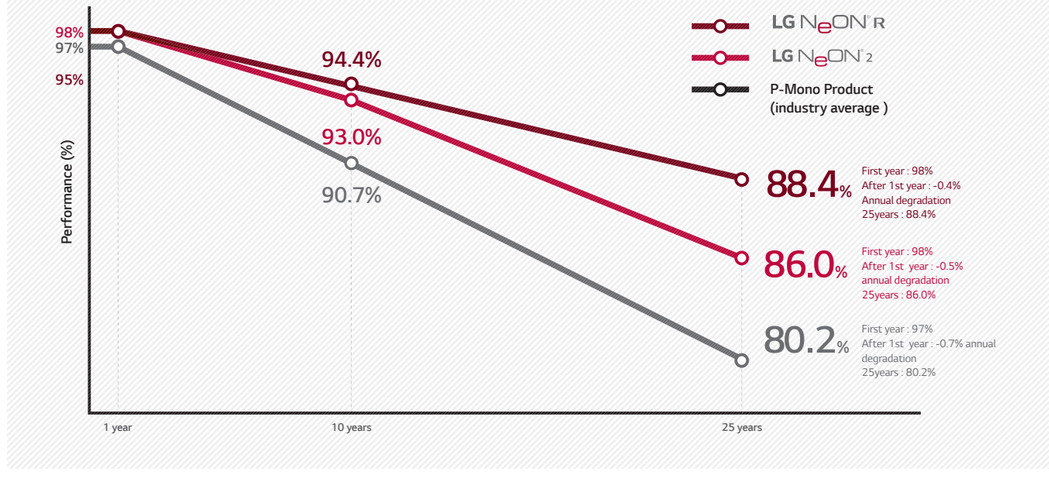
LG Solar's PV modules are built on an automated production line in order to maintain the utmost precision and quality, and LG is the first corporation in the world to operate in-house solar testing facilities that are certified by the 4 major inspection and certification authorities.



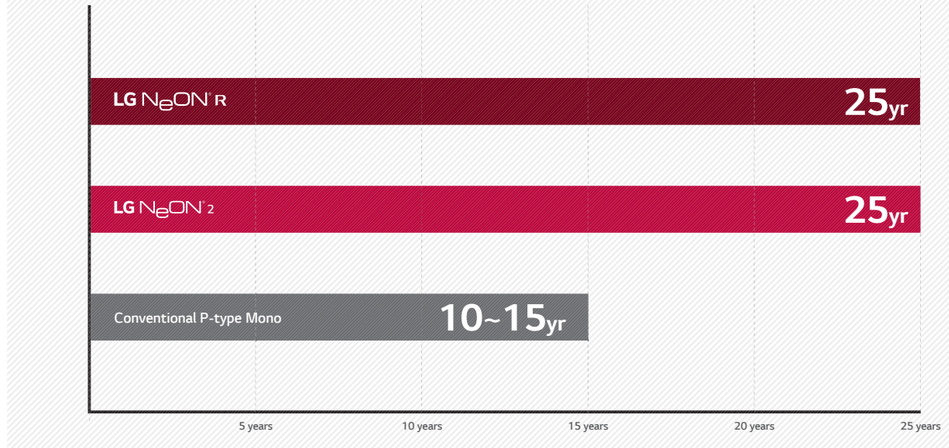
Superior Performance Warranty

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 Solar'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.

LG NeON® R
60cell

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 1st year : 0.4% annual degradation, 25 years : 88.4%	
Product Warranty		25 years	

Features

Technical and Aesthetic Advantages

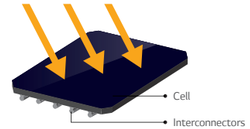
The LG NeON® R is a sleek module that eliminates metal electrodes on the front side. The module's environmental and aesthetic design is ideal for roofs, offering a clean, sleek modern exterior.

Delivers premium black frame

Eliminates electrodes on the front of cells

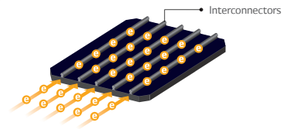
Front

Interconnectors positioned on the cell's rear side maximize light absorption



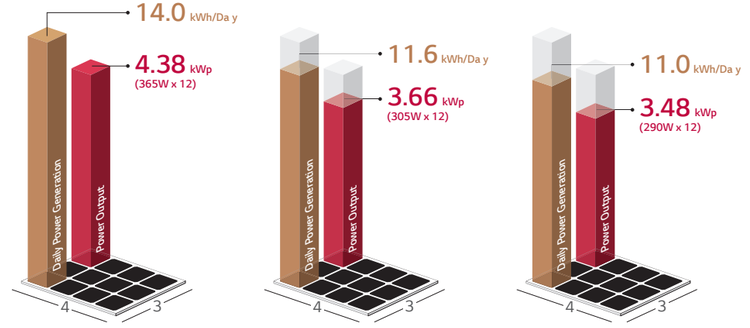
Rear

Increased amount of Interconnectors reduces energy loss



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.

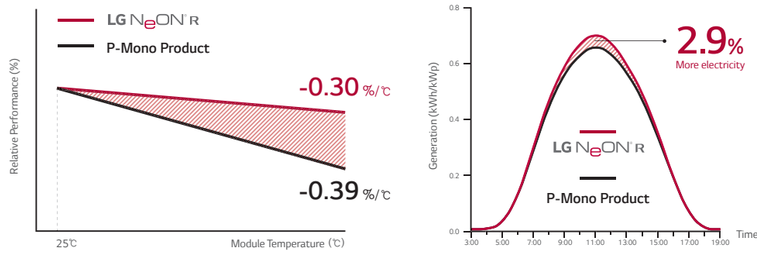


Power Output Comparison of 12-module arrays

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

High Temperature Stability

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

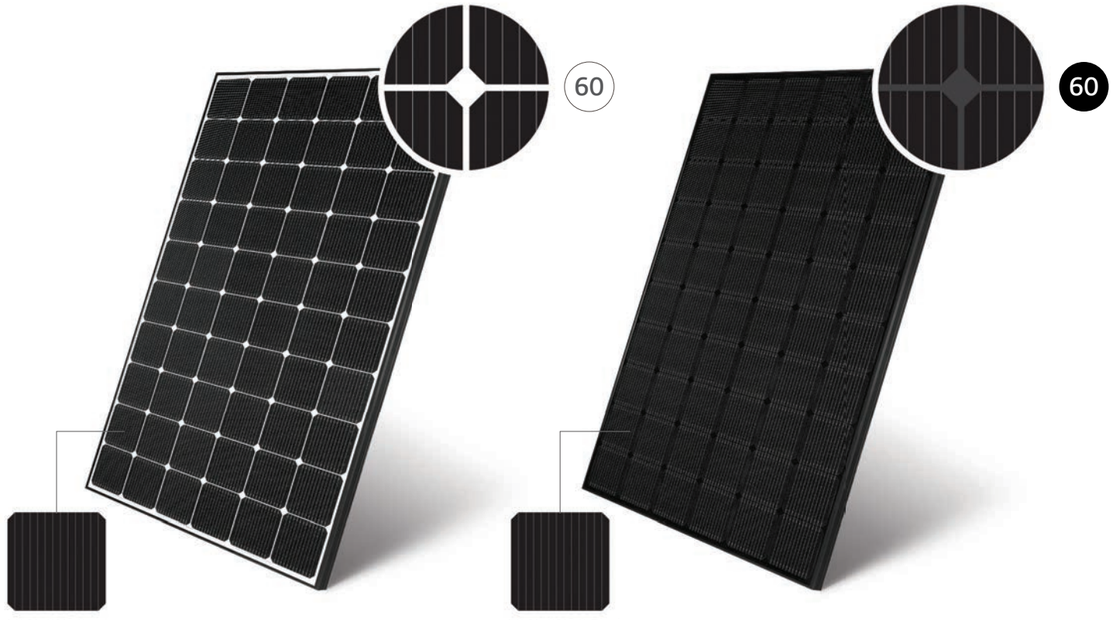


* PV Syst simulation result
* Region : Bayern München, Germany
* One day in July (Highest temperature in a day : 32℃)
* Data source : Pan file, Datasheet

LG NeON® 2 | LG NeON® 2 *Black*

LG Solar's Best-selling Module

The LG NeON® 2 is LG Solar's best-selling 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

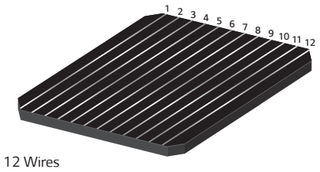
Technical Data

Product Model	LG NeON® 2 60cell		LG NeON® 2 Black 60cell
Cell Type	Monocrystalline / N-type		Monocrystalline / N-type
# of Cells	60cell (6 x 10)		60cell (6 x 10)
Maximum Power	340W	335W	320W
Module Efficiency	19.8%	19.6%	18.7%
Dimensions (L x W x H)	1,686 x 1,016 x 40 mm		1,686 x 1,016 x 40 mm
Weight	18kg		18kg
Output Warranty of Pmax	Linear Warranty (First year : 98%, After 1st year : 0.5% annual degradation, 25 years : 86%)		
Product Warranty	25 years		

Features

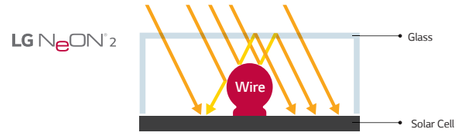
Cello Technology™

Cello Technology™

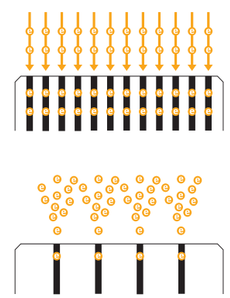


12 Wires

Increased Light Absorption

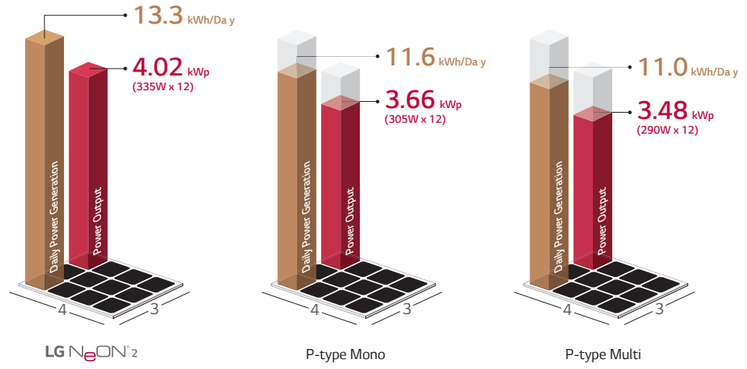


Reduced Electricity Loss



High Power Module

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



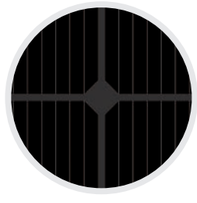
* PV Syst simulation result
* Region : Bayern München, Germany
* Data source : Pan file, Datasheet

Power Output Comparison of 12-module arrays

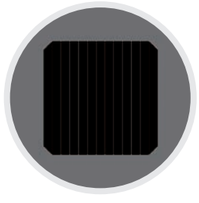
Aesthetic Black Module

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

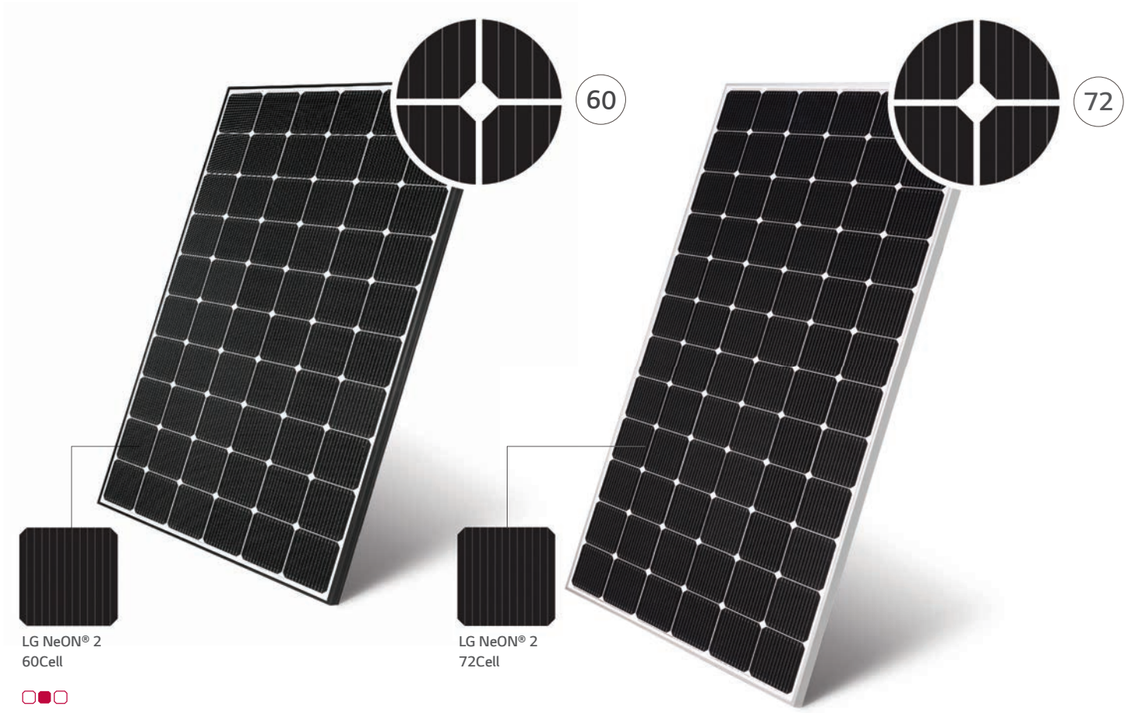


Black Cell with
Cello Technology

LG NeON® 2

LG Solar's Best-selling Module

The LG NeON® 2 is LG Solar's best-selling 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
72Cell

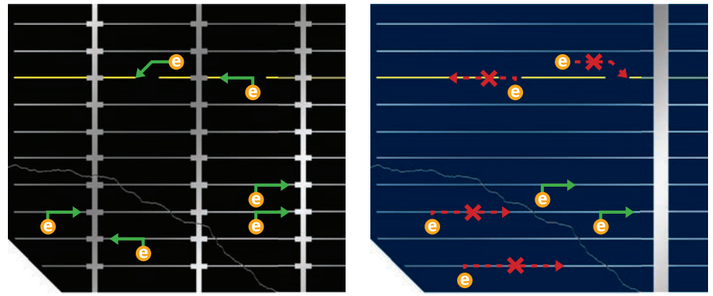
Technical Data

Product Model	LG NeON® 2 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, 25 years : 86%)			
Product Warranty	25 years			

Features

Enhanced Long-term Reliablity

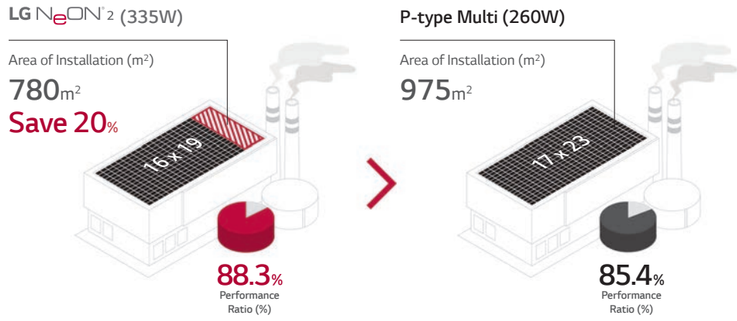
When micro-cracks or finger electrode erosion occurs due to outside factors, LG NeON® 2 reduces down performance by blocking the electrical path due to the layout of wires.



Multiple electrical paths maintained by wires

High Power Module

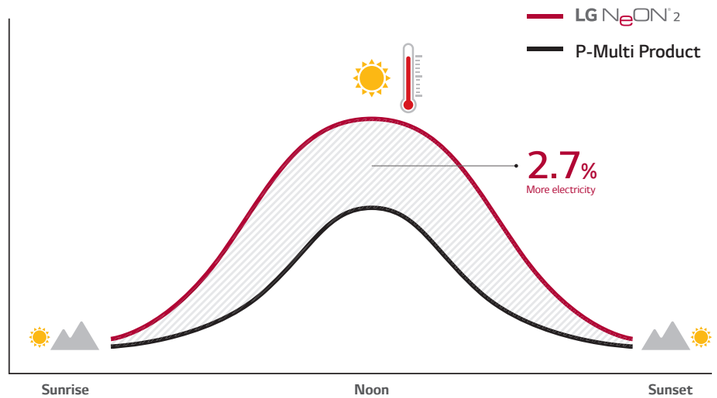
The LG NeON® 2 produces more energy than conventional P-type Multi modules, allowing energy requirements to be met using less space.



* PV Syst simulation result
* Region : Bayern München, Germany
* Data source : Pan file, Datasheet
* Pitch : 5.5m
* The distance between modues 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.

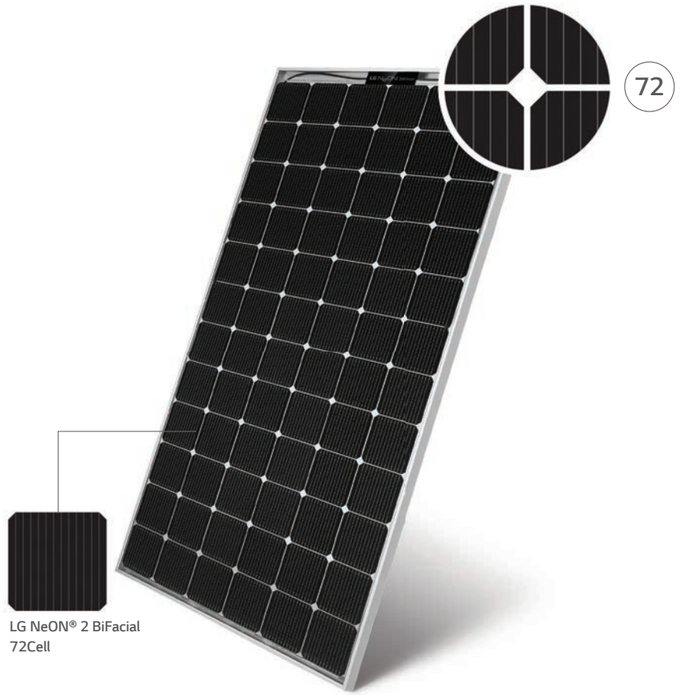


* PV Syst simulation result
* Region : Bayern München, Germany
* One day in July(Highest temperature in a day : 32℃)
* Data source : Pan file, Datasheet

LG NeON® 2 BiFacial

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.



LG NeON® 2 BiFacial
72Cell

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, 25 years : 86%)	
Product Warranty	25 years	

Features

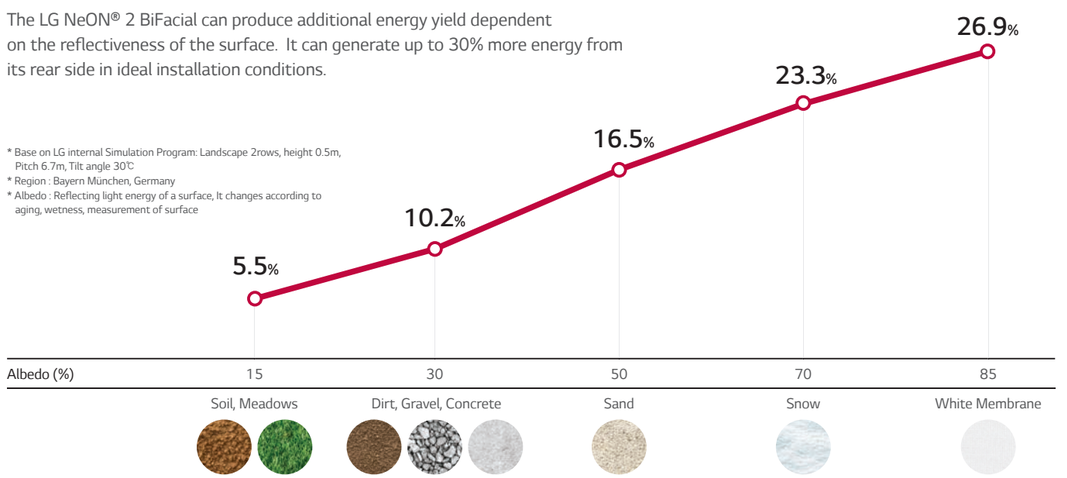
N-type Cell (double-sided generation cell structure)

Using a NeON® cell that 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_Kolliken

REFERENCE

Commercial

Thailand_Bangkok

Australia_Sydney

Korea_Sejong

Utility

USA_Easton

Japan_Hokkaido

Japan_Aomori

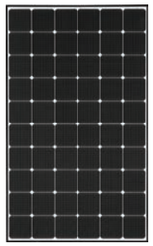
PRODUCT LINE-UP

LG NeON® R

370W
365W
360W

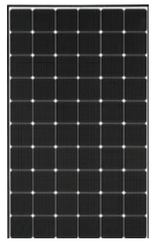
LG NeON® R
60Cell

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

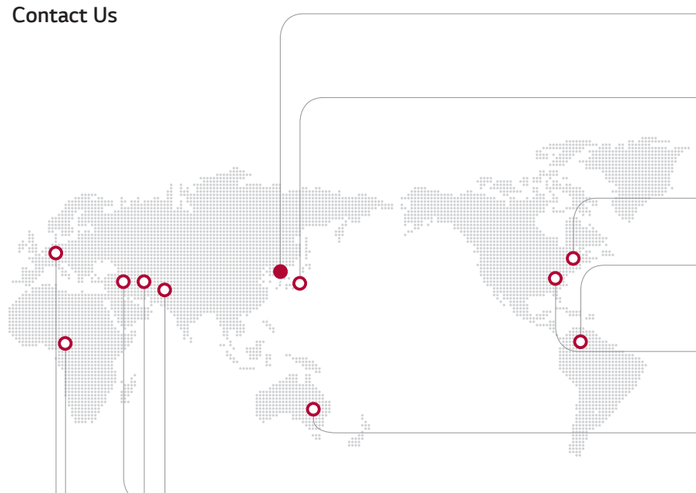
LG NeON® 2 Bifacial
72Cell

LG Solar Is Your Renewable Energy 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 in the electronics industry, LG has developed premium solar modules that provide long-term quality and high energy output.

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

Contact Us



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