



2020 LG Solar Product Catalog



www.lg.com/solar

LG is committed to partnering with the sun to produce clean, renewable energy for decades.

Because photovoltaic (PV) modules have a long lifespan, choosing a well-built product from a trusted brand is important. Thanks to over 30 years of diligent solar research and development, LG is able to provide PV modules with outstanding quality and performance. In addition, our global reputation as a stable, reliable brand provides our customers with peace of mind.



Contents



Why LG Solar?

- Brand Power
- Leading Technology
- Quality

LG NeON® Series

- LG NeON® R | LG NeON® R Prime
- LG NeON® R ACe
- LG NeON® 2 | LG NeON® 2 Black
- LG NeON® 2 ACe | LG NeON® 2 ACe Black
- LG NeON® 2 | LG NeON® 2 BiFacial

Reference

Contact Us

LG Solar. A Name You Can Trust

For more than 60 years and 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 quality in our newer ventures, such as our Vehicle Component and Energy Business companies.

LGE LG Electronics has a vast global presence, with manufacturing and production plants, sales offices, and research and development facilities in 128 countries, fully supporting our businesses in over 200 countries. LGE strives to change the life and businesses of our customers around the world, with innovative technologies and products.



REVENUE

\$53 billion(2019)

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

Workforce

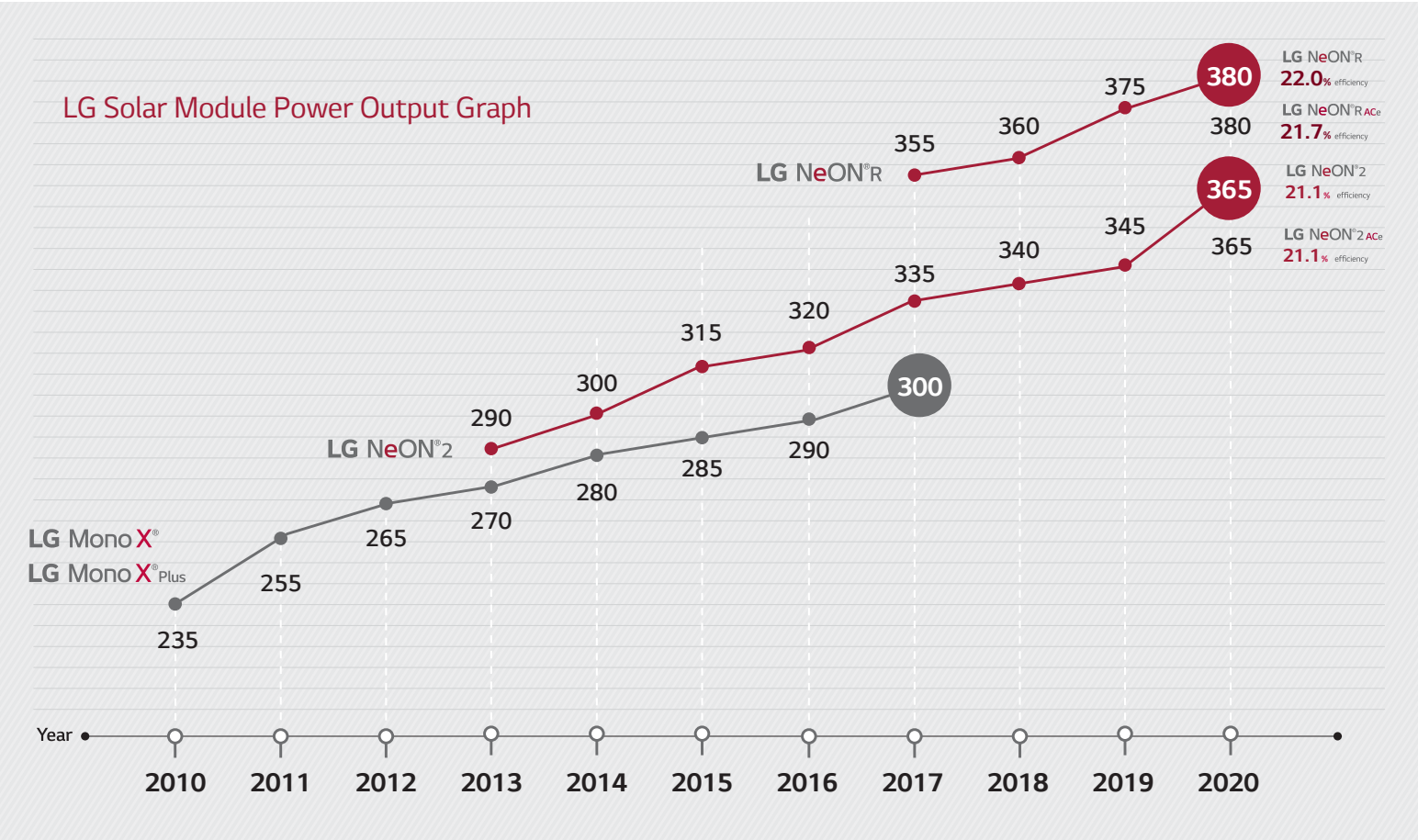
74,000+

World Presence

142 Global Operations

Leading Solar Technology

LG Solar is an internationally recognized manufacturer for groundbreaking ideas and technological innovations that set it ahead of the competition.



LG Solar Awards & Innovation in Technology

2020



2020 Energy Star
Partner of the Year

2019



2019
Architectural
Product
Innovation



pv magazine
Award 2019



Architect's
Newspaper
Best of
Products



Green Builder's
Hot 50 Products
Award - LG ESS



2019 Energy
Manager
Today
Awards

2016 / 2017



Intersolar
Award 2016
[Winner]



EUPD
Research
Top Brand
[Module]
2016



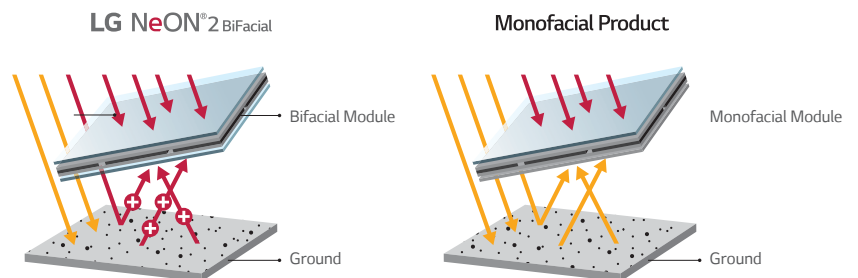
EUPD
Research
Top Brand
[Module]
2017



Judge's
Choice
Award
2018
[Winner]

BiFacial Product

LG's BiFacial modules capture light from above and below so they can generate energy from absorbed reflected light.

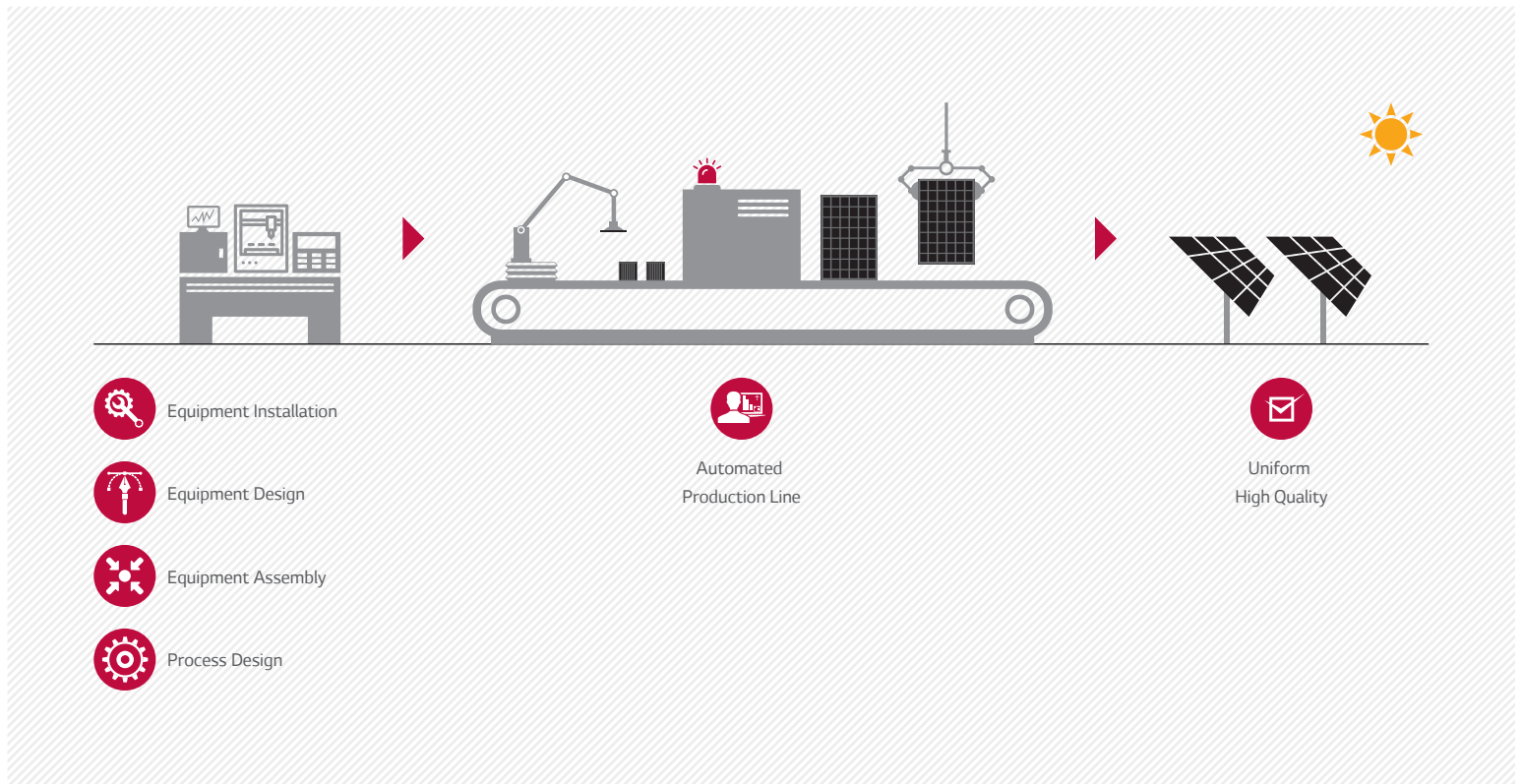


Quality: LG Panels are Built-to-Last

LG is focused on the quality of every solar panel that enters the market with our name on it. At our own manufacturing facilities, we can be sure every product is manufactured with the materials we choose under stringent quality control procedures. LG solar panels are tested in our own in-house and third party testing laboratories, and are regularly tested up to three times the IEC standards to ensure a robust module. Our goal is to provide the highest possible quality so we can live up to our reputation as a trusted global brand.

Operational Excellence & Testing Facilities

To maintain high quality and precision, LG operates an automated production line.



Peace of Mind Warranty



Our solar modules are backed by a 25-year limited warranty that consists of product, performance, and labor coverage.

Product

Our commitment to controlling every step of the manufacturing process from start to finish ensures that we build and deliver a quality product every time. Thanks to thorough testing processes, LG ensures that each module off the production line will perform well in real-world conditions. No solar modules leave our factory until our quality-control specialists approve their performance. LG's high standards result in world-class products for our customers. That's why we are able to offer an outstanding 25-year product warranty.

Performance

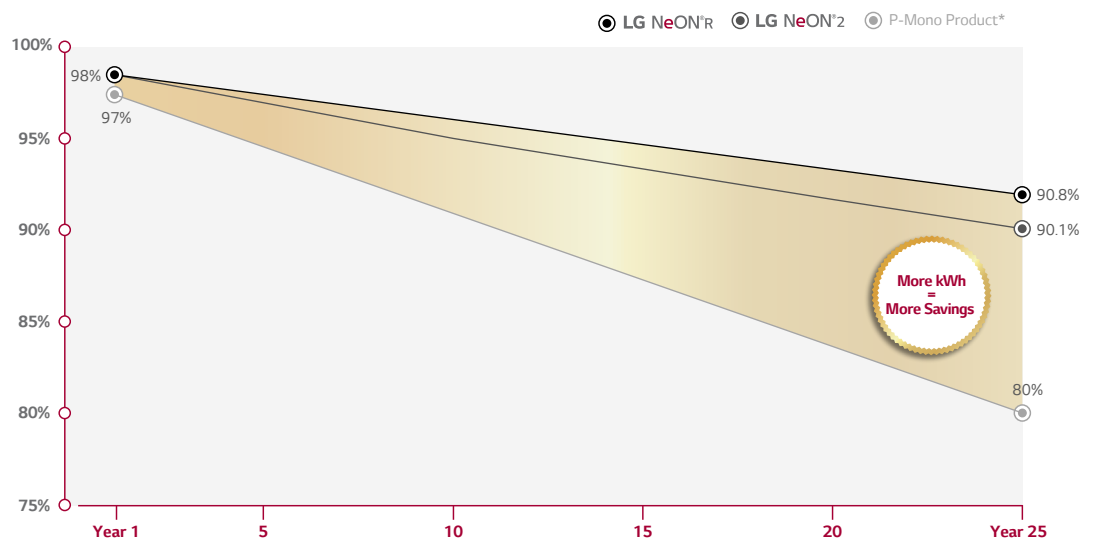
You want quality solar modules to power your home with clean energy for years, so your modules' ability to generate the electricity you need over the long term is critical. All solar panels degrade over time, but LG's products are built to experience low degradation rates. In fact, after the first year of installation, our LG NeON® R model has a degradation rate of only -0.3% per year, and our NeON® 2 has a degradation rate of -0.33% per year.

Labor

In the rare case that a module needs to be replaced or repaired, LG won't just cover the cost of the materials; we'll also cover labor costs up to \$450. When you choose LG solar products, you can feel confident that you are making a smart choice and investing in a quality product that will benefit your home for years to come.

Higher performance over the lifetime of the system

LG panels degrade slower than the industry average, ensuring our customers have long-lasting high performance.



*Average from 11 Module Manufacturers

Product Line - Up

LG NeON[®]R



380W
375W
370W

LG NeON[®] R
60 Cell



365W
360W

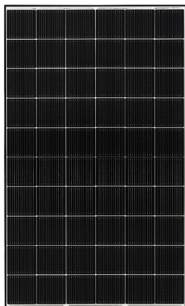
LG NeON[®] R Prime
60 Cell



375W

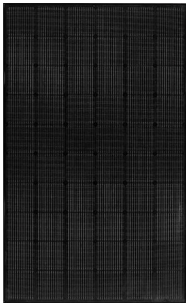
LG NeON[®] R ACe
60 Cell

LG NeON[®]2



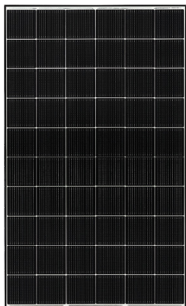
365W
360W
355W

LG NeON[®] 2
60 Cell



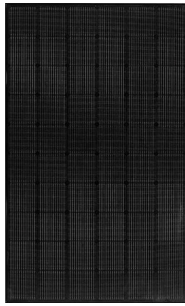
345W
340W

LG NeON[®] 2 Black
60 Cell



365W

LG NeON[®] 2 ACe
60 Cell



345W

LG NeON[®] 2 ACe Black
60 Cell



420W
415W

LG NeON[®] 2
72 Cell



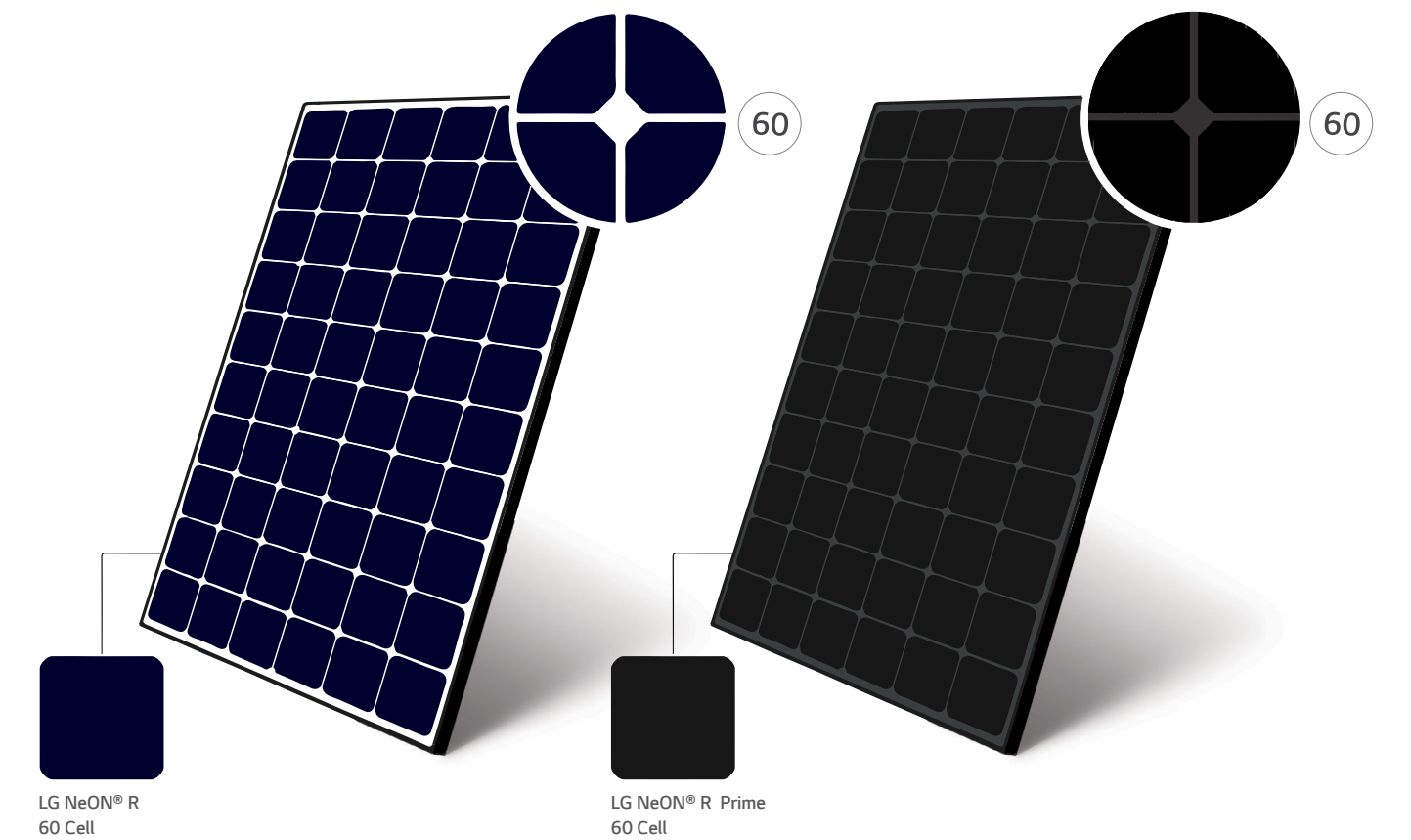
410W
405W

LG NeON[®] 2 BiFacial
72 Cell

LG NeON[®]R | LG NeON[®]R Prime

High Power Output, High-Efficiency Modules

The LG NeON[®] R is a high-power luxury solar panel featuring Back Contact Technology™. The advanced cell structure locates all of the module's electrodes on the back side. No front-module electrodes are present to affect light capture. This also provides a sleek, modern appearance.



Technical Data

Product Model	LG NeON® R 60 Cell			LG NeON® R Prime 60 Cell	
Cell Type	Monocrystalline / N-type				
# of Cells	60 Cell (6 x 10)				
Maximum Power	380W	375W	370W	365W	360W
Module Efficiency	22.0%	21.7%	21.4%	21.1%	20.8%
Dimensions (L x W x H)	1,700 x 1,016 x 40mm				
Weight	17.5kg				
Frame/Backsheet	Black/White			Black/Black	
Output Warranty of Pmax	Linear Warranty (First year: 98%, After 1st year: 0.3% annual degradation, 25 years: 90.8%)				
Product Warranty	25 years				

LG NeON[®] R Features

Near Zero LID

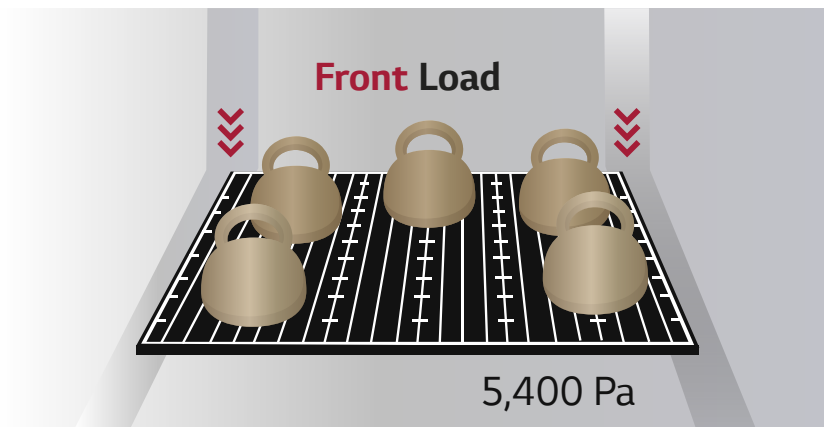
The LG NeON[®] R has been manufactured with N-type wafers, which use phosphorus. This leads to extremely low Light Induced Degradation (LID) rates.



LG NeON[®] R / Phosphorus in N-Type wafers improves LID rates

Long-term Durability

All LG Solar modules feature a reinforced frame design that allows for a strong load. The NeON[®] R Prime can handle a front load of 5,400 Pa and a rear load of 4,000 Pa. This is especially impressive considering our NeON[®] R Prime solar modules weigh less than 40lbs. The NeON[®] R Prime creates less stress on your roof due to its low weight, while still offering excellent durability.



Low Temperature Coefficient

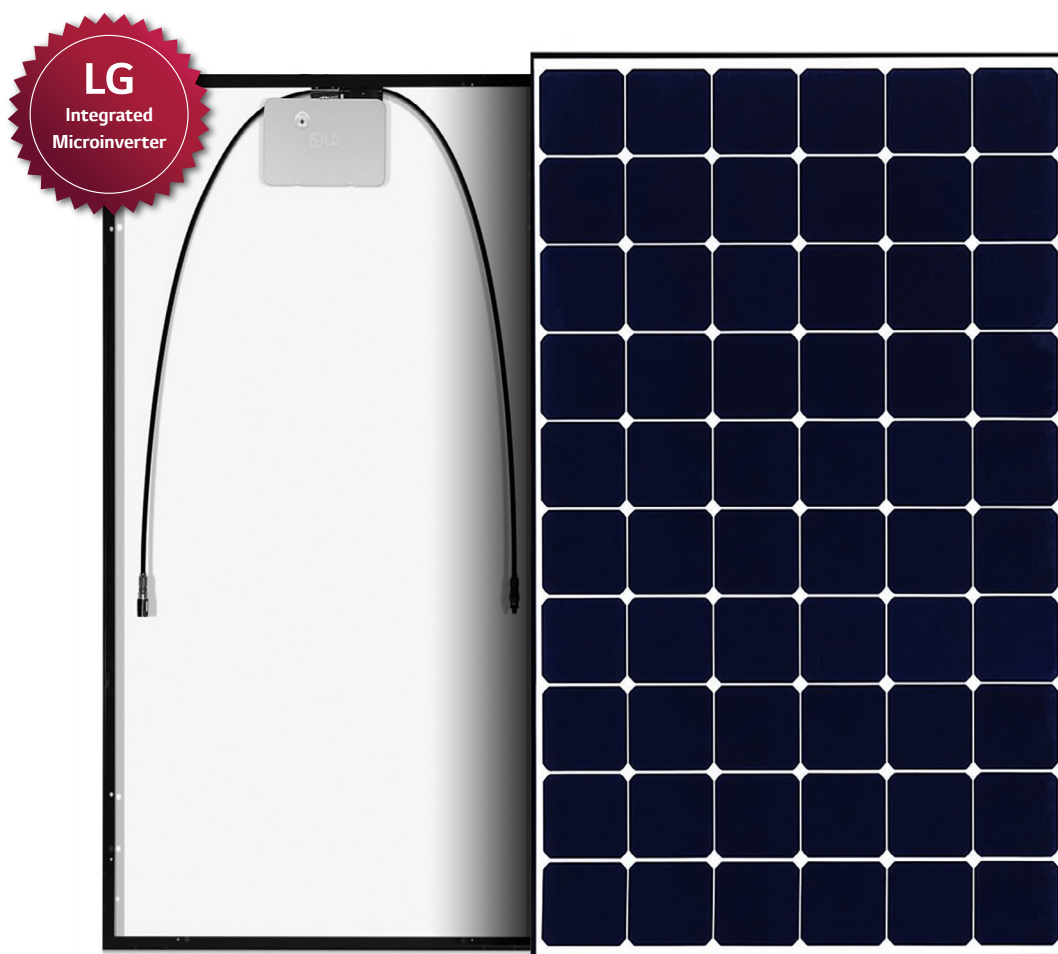
The LG NeON[®] R modules boast a low -0.30% temperature coefficient, which means they perform well even on hot days.



LG NeON[®] R ACe

High Power Output, High-Efficiency Modules

The LG NeON[®] R ACe is an integrated solar module and microinverter in one designed for easy installation and use. The ACe is a smart AC module that is easy to install and monitor, provides increased flexibility for array design and is an excellent solution for home installation.



Technical Data

Product Model	LG NeON [®] R ACe 60 Cell
Cell Type	Monocrystalline / N-type
# of Cells	60 Cell (6 x 10)
Maximum Power	375W
Module Efficiency	21.7%
Dimensions (L x W x H)	1,700 x 1,016 x 40mm
Weight	19kg
Frame/Backsheet	Black/White
Output Warranty of Pmax	Linear Warranty (First year: 98%, After 1st year: 0.3% annual degradation, 25 years: 90.8%)
Product Warranty	25 years

LG NeON® R ACe Features

Flexible Array Design

LG NeON® R ACe offers flexibility of array design. It provides a similar installation process as a DC module, with simple accessories and connection cable.



Connects To Your Devices

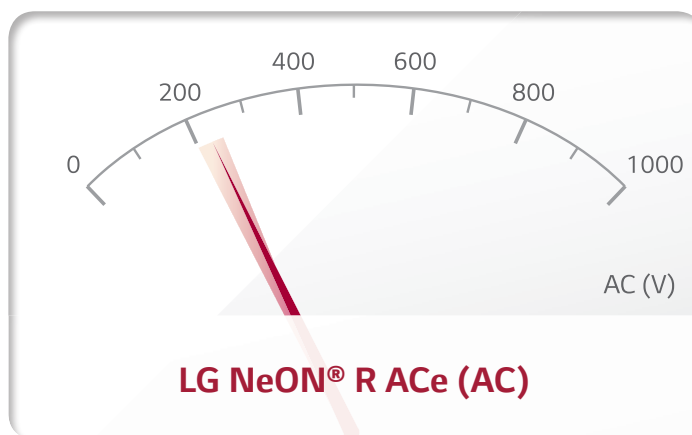
LG NeON® R ACe has easy and quick steps to connect with the internet. In addition, the LG NeON® R ACe is easy to register modules on the system.



Lower Voltage

Reduced risk of fire since the system uses low voltage and AC.

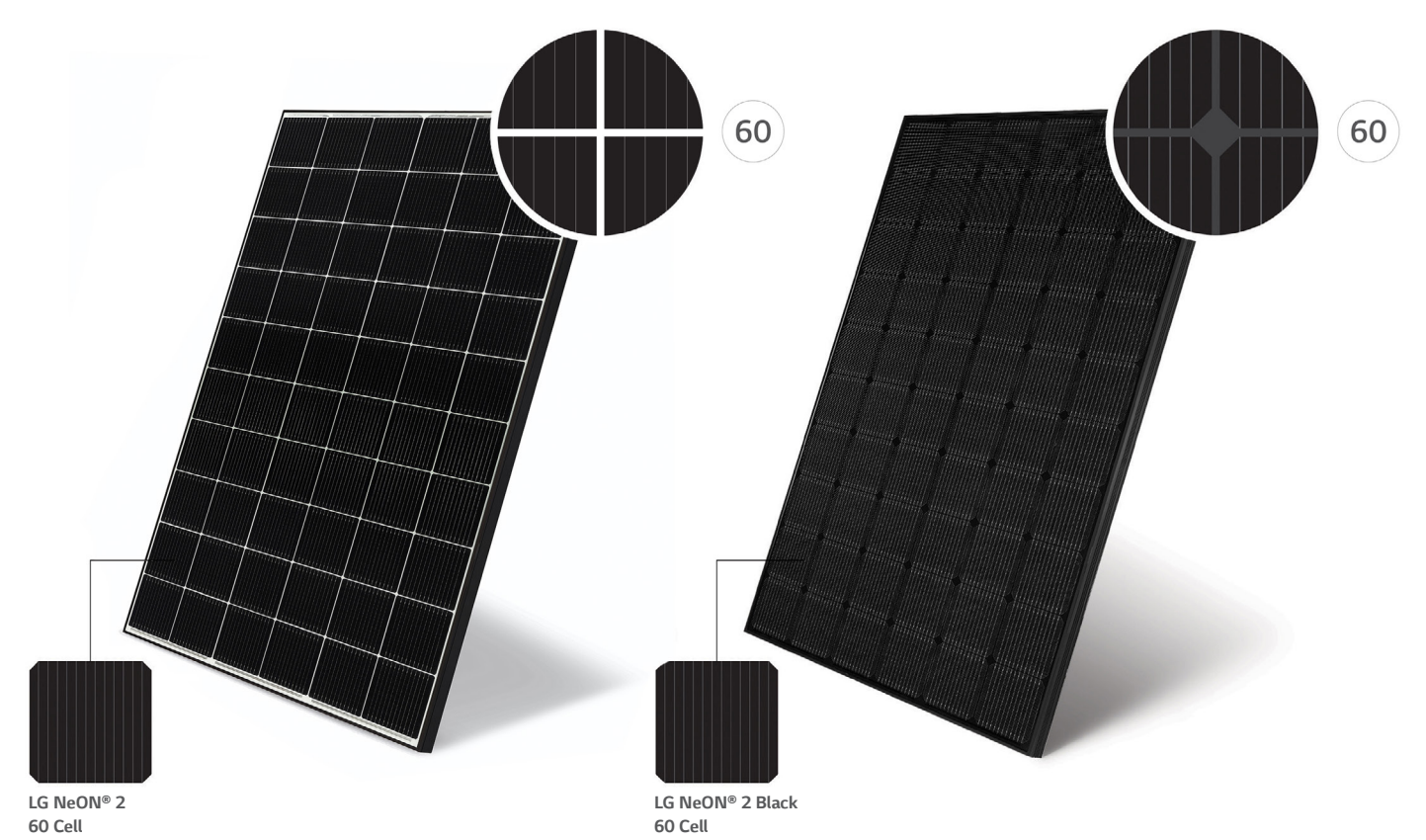
No high voltage DC wiring with 600 or 1000 volts. All AC wiring with 208 or 240 volts.



LG NeON[®] 2 | LG NeON[®] 2 Black

LG Solar's Best-Selling Module

The LG NeON[®] 2 is LG's best-selling solar panel. Featuring LG's Cello Technology™, the LG NeON[®] 2 provides 3% more power output than our previous generation NeON[®] 2 panels. The cells are designed to appear all-black at a distance, and the performance warranty guarantees 90.1% of labeled power output at 25 years.



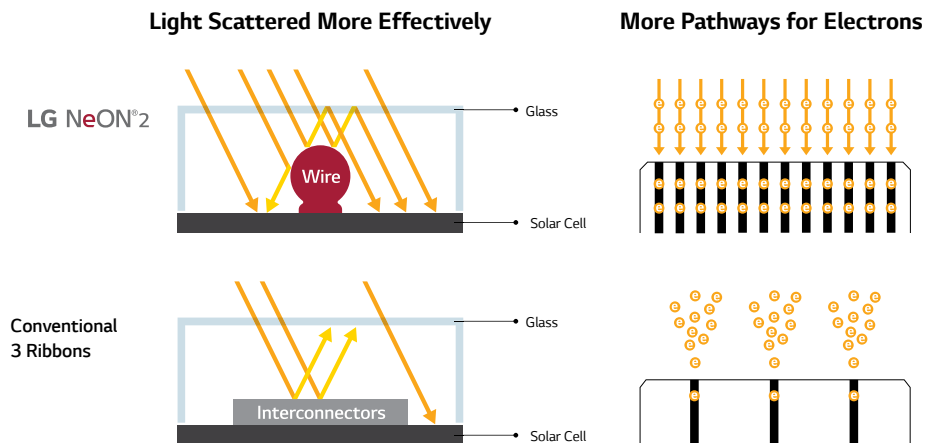
Technical Data

Product Model	LG NeON® 2 60 Cell			LG NeON® 2 Black 60 Cell	
Cell Type	Monocrystalline / N-type				
# of Cells	60 Cell (6 x 10)			60 Cell (6 x 10)	
Maximum Power	365W	360W	355W	345W	340W
Module Efficiency	21.1%	20.8%	20.5%	20.0%	19.7%
Dimensions (L x W x H)	1,700 x 1,016 x 40 mm				
Weight	18 kg				
Frame/Backsheet	Black/White			Black/Black	
Output Warranty of Pmax	Linear Warranty (First year: 98%, After 1st year: 0.33% annual degradation, 25 years: 90.1%)				
Product Warranty	25 years				

LG NeON[®] 2 Features

Award-Winning Cello Technology™

A specialized cell technology that improves opportunity for light absorption through circular-shaped wires that scatter light more effectively. This results in an increase of power output and improved appearance.



High-Efficiency Modules

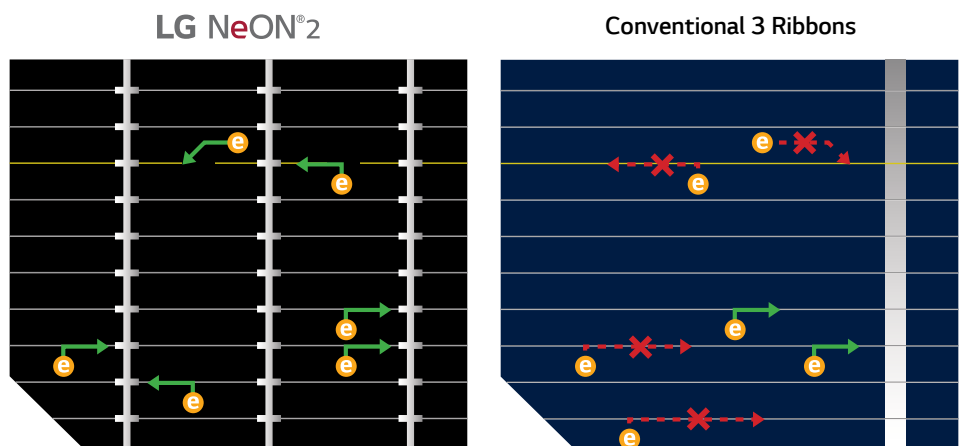
LG NeON[®] 2 modules are high-efficiency modules that generate more power from the same amount of sunlight than lower-efficiency modules of the same size.

High-efficiency modules are an advantage on smaller roofs or on roofs that experience some shading. They can also leave room for array expansion in the future.



Long-term Reliability

Micro-cracks in finger electrodes may occur when there is mechanical or thermal stress on solar cells. The LG NeON[®] 2 is less vulnerable to performance losses due to environmental damage due to the strategic layout of wires.

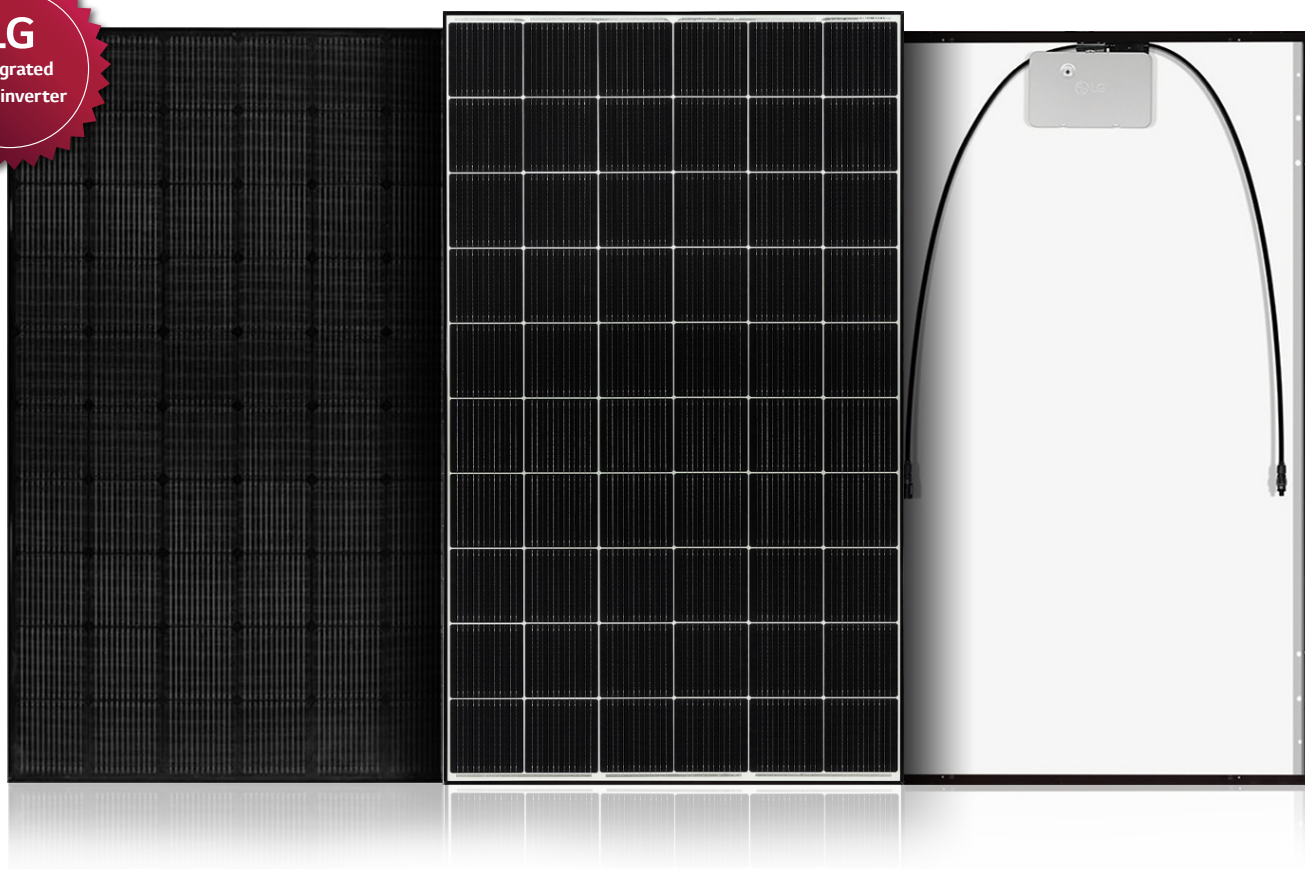


Multiple electrical paths maintained by wires

New

LG NeON[®] 2 ACe

LG's NeON[®] R ACe is an integrated solar module and microinverter in one designed for easy installation and use. The ACe is a smart AC module that is easy to install and monitor, provides increased flexibility for array design and is an excellent solution for home installation.



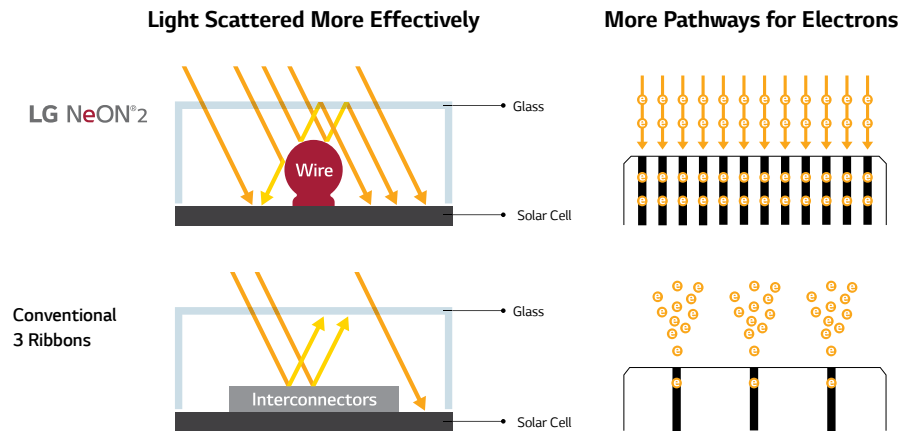
Technical Data

Product Model	LG NeON [®] 2 ACe 60 Cell	LG NeON [®] 2 ACe Black 60 Cell
Cell Type	Monocrystalline / N-type	
# of Cells	60 Cell (6 x 10)	
Maximum Power	365W	345W
Module Efficiency	21.1%	20.0%
Dimensions (L x W x H)	1,700 x 1,016 x 40mm	
Weight	19.5 kg	
Frame/Backsheet	Black/White	Black/Black
Output Warranty of Pmax	Linear Warranty (First year: 98%, After 1st year: 0.33% annual degradation, 25 years: 90.1%)	
Product Warranty	25 years	

LG NeON[®] 2 ACe Features

Award-Winning Cello Technology™

A specialized cell technology that improves opportunity for light absorption through circular-shaped wires that scatter light more effectively. This results in an increase of power output and improved appearance.



NeON[®] 2 ACe Accessories

With no separate microinverter or trunk cabling to install and very few balance-of-system parts (often just one transition cable and two end caps) the NeON[®] 2 ACe modules are quick and easy to install.



Connects To Your Devices

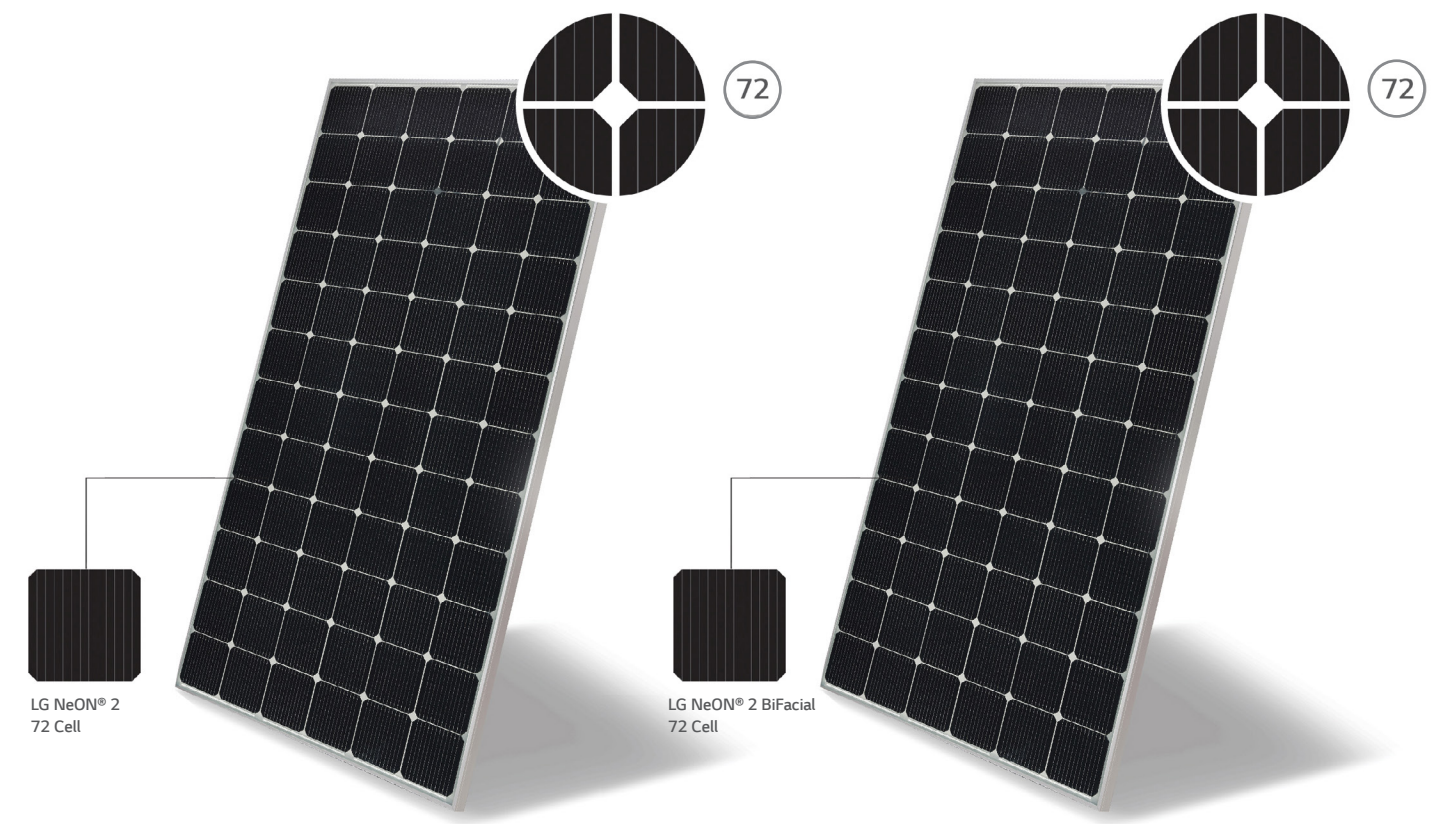
LG NeON[®] 2 ACe has easy and quick steps to connect with the internet. In addition, the LG NeON[®] 2 ACe is easy to register modules on the system.



LG NeON[®] 2 | LG NeON[®] 2 BiFacial

Double-Sided Generation

The LG NeON[®] 2 BiFacial has a double-sided cell structure with a transparent back sheet. Modules generate energy from the front and back side.



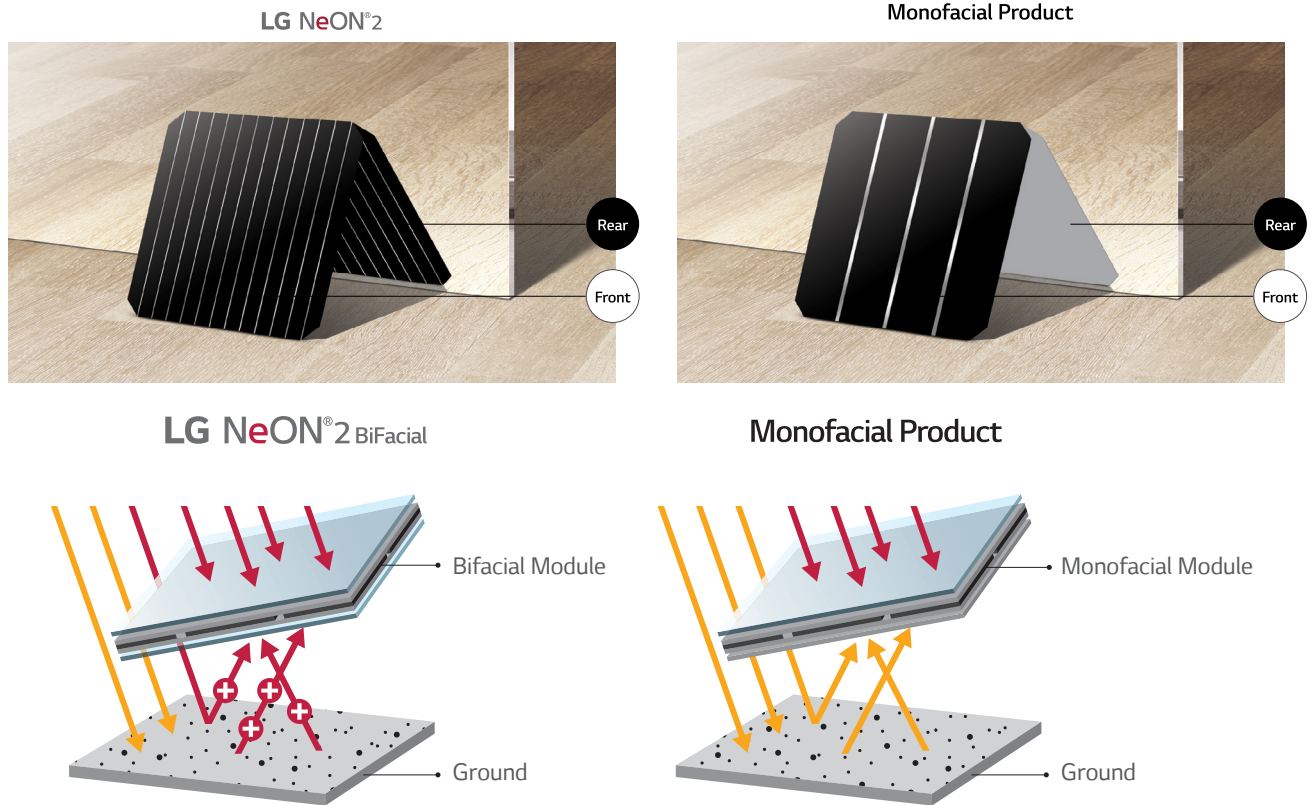
Technical Data

Product Model	LG NeON® 2 72 Cell		LG NeON® 2 BiFacial 72 Cell	
Cell Type	Monocrystalline / N-type			
# of Cells	72 Cell (6 x 12)		72 Cell (6 x 12)	
Maximum Power	420W	415W	410W	405W
Module Efficiency	20.3%	20.0%	19.8%	19.5%
Dimensions (L x W x H)	2,024 x 1,024 x 40 mm		2,024 x 1,024 x 40 mm	
Weight	20.3kg		20.3kg	
Frame/Backsheet	Silver/White		Silver/Transparent	
Output Warranty of Pmax	Linear Warranty (First year: 98%, After 1st year: 0.33% annual degradation, 25 years: 90.1%)		Linear Warranty (First year: 98%, After 1st year: 0.35% annual degradation, 25 years: 89.6%)	
Product Warranty	25 years			

LG NeON[®] 2 Features

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

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



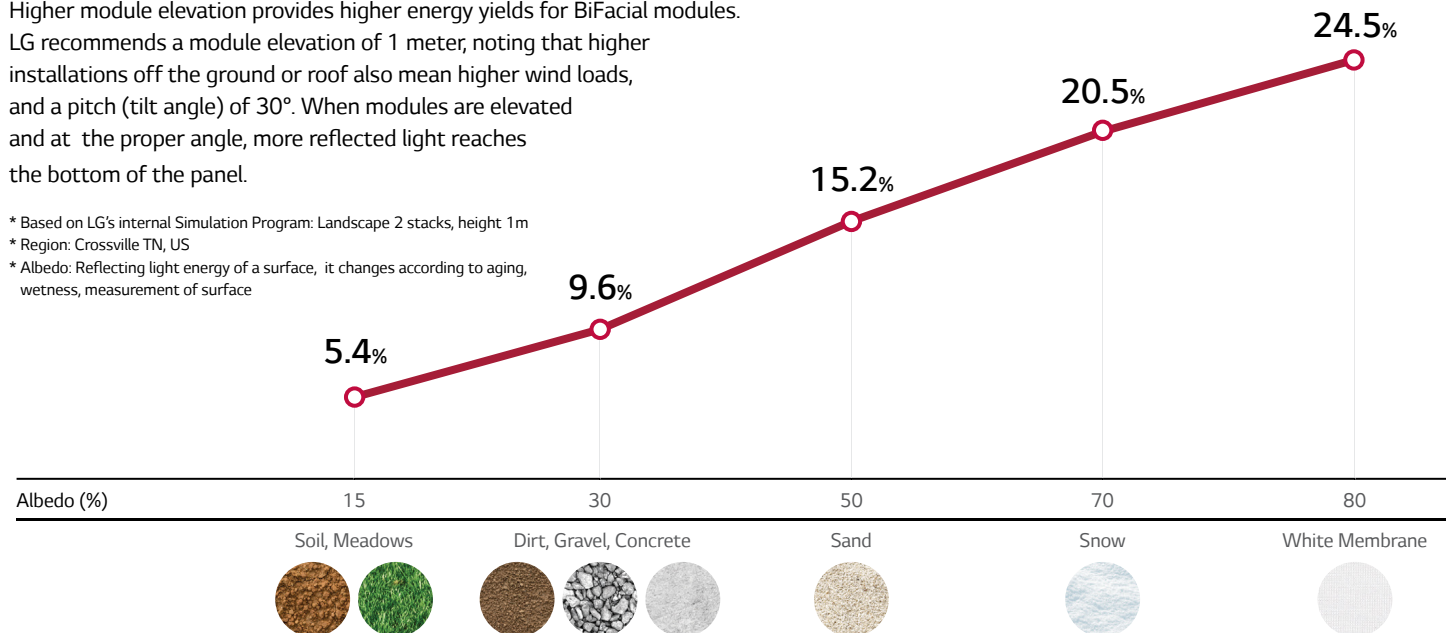
Module Elevation and Pitch

Higher module elevation provides higher energy yields for BiFacial modules. LG recommends a module elevation of 1 meter, noting that higher installations off the ground or roof also mean higher wind loads, and a pitch (tilt angle) of 30°. When modules are elevated and at the proper angle, more reflected light reaches the bottom of the panel.

* Based on LG's internal Simulation Program: Landscape 2 stacks, height 1m

* Region: Crossville TN, US

* Albedo: Reflecting light energy of a surface, it changes according to aging, wetness, measurement of surface



Reference

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 70 years of experience in the electronics industry, LG has developed premium solar modules that provide long-term quality and high energy output. Discover some of our installations:







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www.lg.com/solar

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