



2021 Product Catalog

# LG NeON<sup>®</sup> Solar Panels

**LG Solar**  
Power the Possibilities™

[www.lg.com/us/solar](http://www.lg.com/us/solar)



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### LG NeON® Series

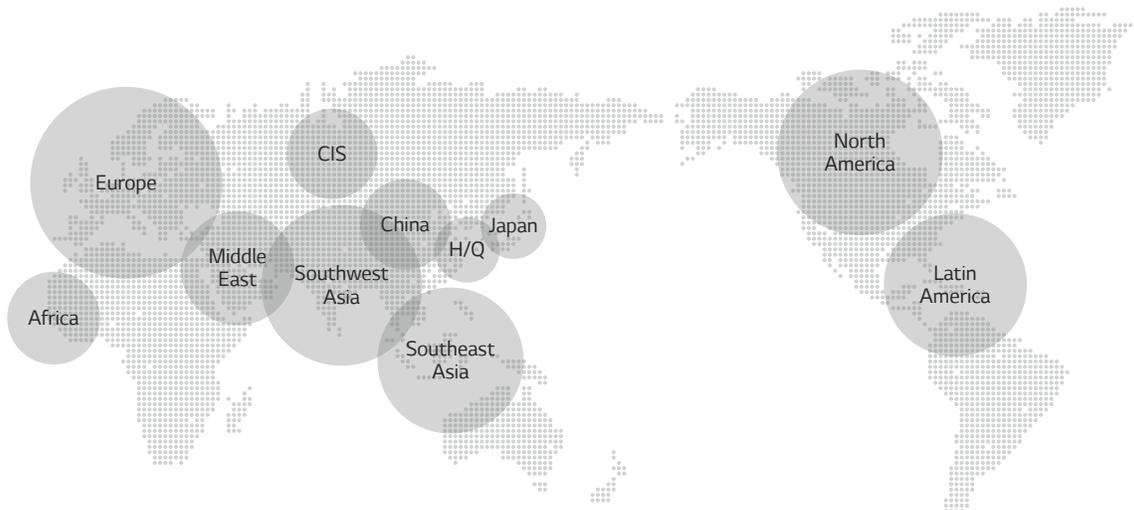
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## Powered by a Name You Can Trust

LGE has 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 lives and businesses of our customers around the world with innovative technologies and products. Backed by the corporation's global presence and financial stability, LGE will provide promising service and support for the lifetime of your solar solutions and continue the positive and productive relationship to enhance mutual benefit.



### REVENUE



\$53 Billion (2019)

LGE consolidated basis, exchange rate KRW 1,108.51 per USD

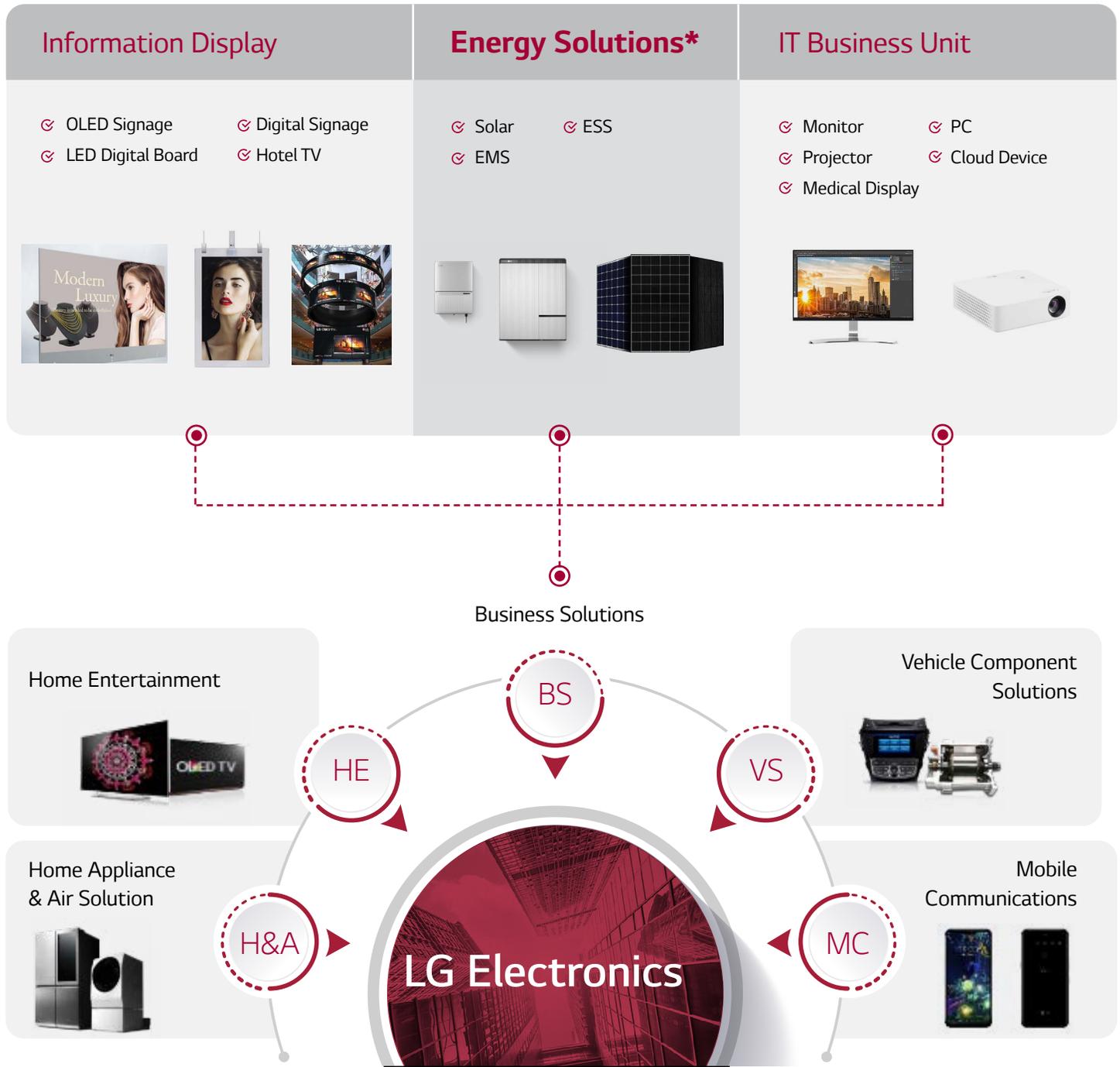
### WORKFORCE



74,000+

# Powering Innovation

LG is a global leader for innovation in electronics, mobile communication devices and home appliances that enhance lives every day.



\*Integrated Solution Case



# Powering Industry-Leading Solar Technology

LG started with a vision of becoming a global leader in the electronics and technology industries, enriching customer lives and driving innovation. In particular, to deliver industry-leading panel efficiency, LG has consistently invested in R&D, resulting in a 200W increase in output over the past decade from 240W to 440W. Our technology leadership and competitive edge in the industry are shown through our R&D capabilities, which have led to a steady rise in energy output for over 10 years.



## LG Solar Awards & Innovation in Technology

2021 wins to date	<p>Green Builder Hot 50 Awards LG NeON<sup>®</sup> R ACe</p>	<p>Best of IBS Awards 2021 Finalist LG NeON<sup>®</sup> R 66-Cell</p>					
2020 wins	<p>Architizer A+ Awards Special Mention LG NeON<sup>®</sup> R ACe</p>	<p>Architect's Newspaper Best of Products Award Honorable Mention LG NeON<sup>®</sup> R ACe</p>	<p>EcoLeaders Awards LG Electronics</p>	<p>The Cleanie Awards Finalist LG Electronics</p>	<p>Architectural Product Innovation Awards LG NeON<sup>®</sup> 2 ACe</p>	<p>House Beautiful Live Better Award LG NeON<sup>®</sup> R ACe</p>	<p>2020 ENERGY STAR<sup>®</sup> Partner of the Year</p>
2019 wins	<p>2019 Architectural Product Innovation Award</p>	<p>pv magazine Award 2019</p>	<p>Architect's Newspaper Best of Products Award LG ESS</p>	<p>Green Builder's Hot 50 Products Award LG ESS</p>	<p>2019 Energy Manager Today Awards LG ESS</p>		

# Powering Peace of Mind



Our solar panels 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 panel off the production line will perform well in real-world conditions. No solar panels 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 panels to power your home with clean energy for years, so your panels' 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.

## Labor

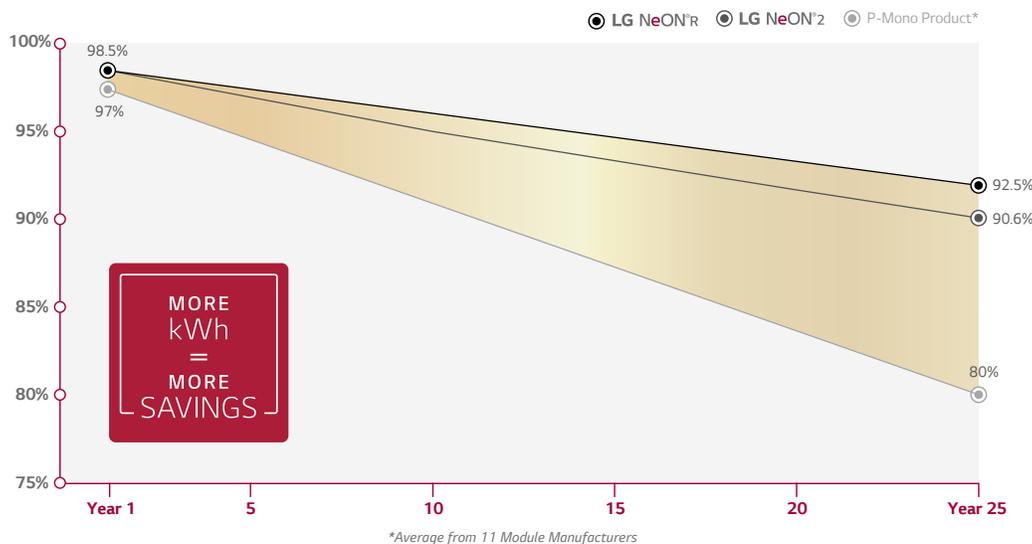
In the rare case that a panel needs to be replaced or repaired, LG won't just cover the cost of the materials; we'll also cover labor costs up to \$450. When you choose LG solar products, you can feel confident that you are making a smart choice and investing in a quality product that will benefit your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

## Transferable Warranty

The warranties provided in the manufacturer's warranty are transferable. This means that when an owner sells the home with LG panels, owners of the property will continue to enjoy the LG warranty protection.

## Higher Performance over the Lifetime of the System

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



# Powering Partnership

LG Solar is your renewable energy partner.

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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 panels that provide long-term quality and high energy output. Discover some of our installations:



# LG NeON<sup>®</sup> Product Lineup

## LG NeON<sup>®</sup>H<sup>+</sup>Black



405W



LG NeON<sup>®</sup> H+ Black  
132-Cell (N3K-V6)

## LG NeON<sup>®</sup>R



435W  
440W

LG NeON<sup>®</sup> R  
66-Cell (QAC-A6)



425W

LG NeON<sup>®</sup> R Prime  
66-Cell (QAK-A6)

## LG NeON<sup>®</sup>2



375W  
380W

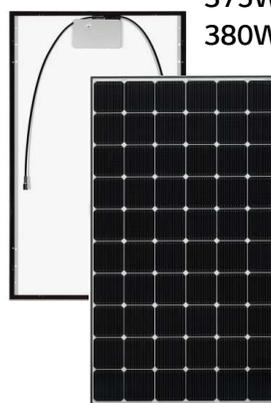
LG NeON<sup>®</sup> 2  
60-Cell (NIC-A6)



370W  
375W

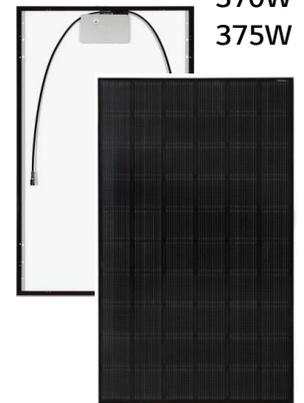
LG NeON<sup>®</sup> 2 Black  
60-Cell (N1K-A6)

## LG NeON<sup>®</sup>2 ACe



375W  
380W

LG NeON<sup>®</sup> 2 ACe  
60-Cell (M1C-A6)



370W  
375W

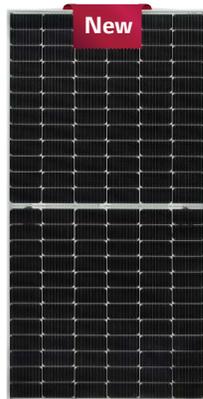
LG NeON<sup>®</sup> 2 ACe Black  
60-Cell (M1K-A6)

## LG NeON<sup>®</sup>H



445W  
450W  
455W

LG NeON<sup>®</sup> H  
144 Half-Cut Cell (N2W-E6)



435W  
440W  
445W

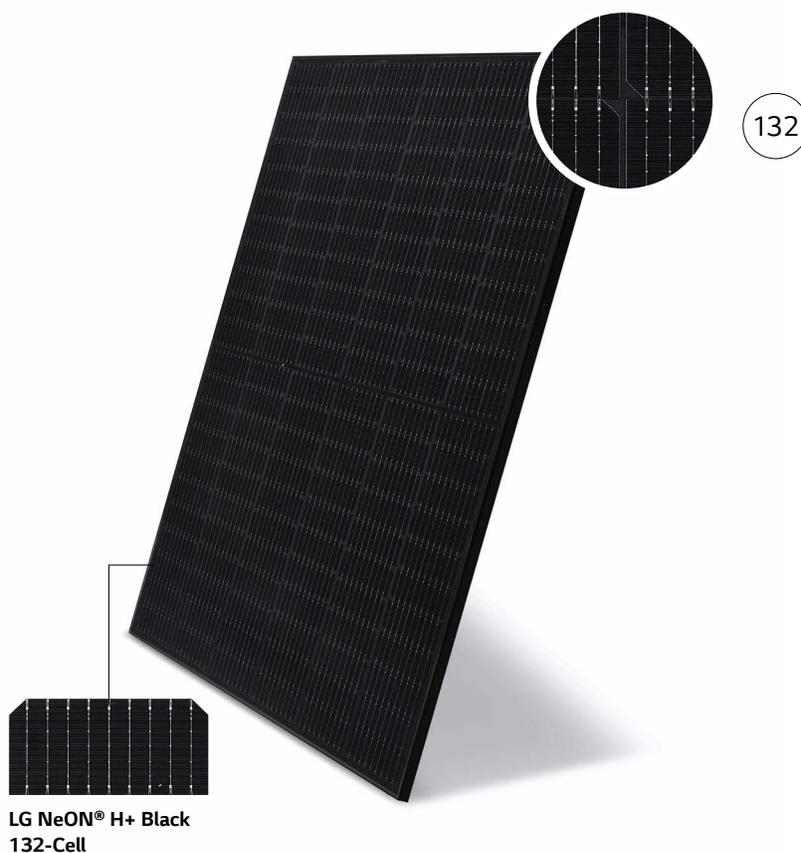
LG NeON<sup>®</sup> H BiFacial  
144 Half-Cut Cell (N2T-E6)

New

# LG NeON<sup>®</sup> H<sup>+</sup> Black

Two Innovative Technologies. One Innovative Solar Panel.

LG NeON<sup>®</sup> H+ Black premium solar panels are the first to feature cells with gap-free technology as well as LG's award-winning Cello Technology—which means they look good and perform even better.



## Technical Data

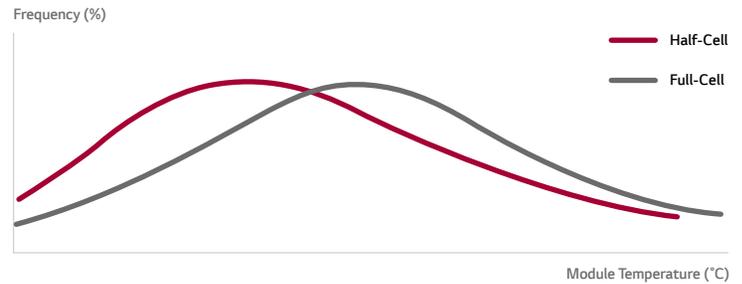
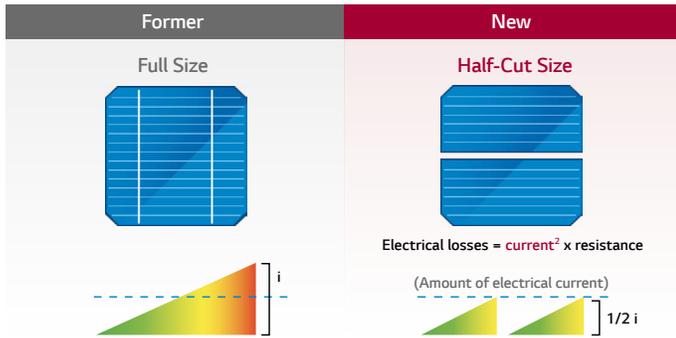
Product Model	LG NeON <sup>®</sup> H+ Black (N3K-V6)
Cell Type	Monocrystalline / N-type
# of Cells	132 Half-Cut Cells (6x22)
Maximum Power	405W
Module Efficiency	20.7%
Dimensions (L x W x H)	1,880mm x 1,042mm x 40mm
Weight	19.7kg
Frame   Backsheet	Black   Black
Output Linear Warranty	1st year 98.5%, from 2-24th year: -0.33%/year down, 90.6% at year 25
Product Warranty	25-Year Limited

# LG NeON® H+ Black Features



## Engineered to Perform

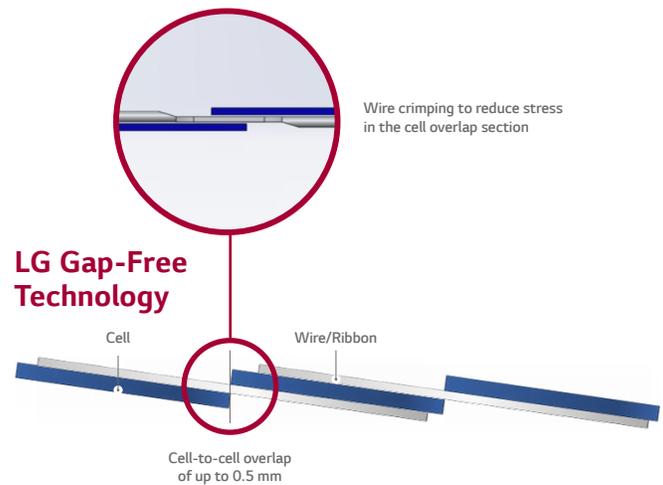
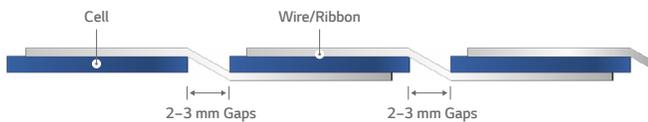
NeON® H+ Black solar panels use gap-free half-cut NeON® 2 cells with LG Cello Technology, allowing them to operate at lower temperatures, reduce power consumption and limit electrical losses. The result is a solar panel that provides greater output and improved reliability even on hotter days.



## Designed to Turn Heads

The gap-free technology used to create NeON® H+ Black panels doesn't just provide increased power density and enhanced performance when combined with our Cello Technology. It helps us create a more aesthetic as well as reliable design by reducing stress where the cells overlap. NeON® H+ Black's gap-free cells are also a deeper black color than conventional solar cells—making them a sleek choice for homeowners who refuse to sacrifice looks for performance.

### Industry Standard



## Reliability You Can Count On

Many solar panels are built with p-type wafers based on boron, which interacts with oxygen to cause light-induced degradation (LID). Because our NeON® H+ Black panels are manufactured with n-type wafers that are based on phosphorus, they experience very low LID rates.

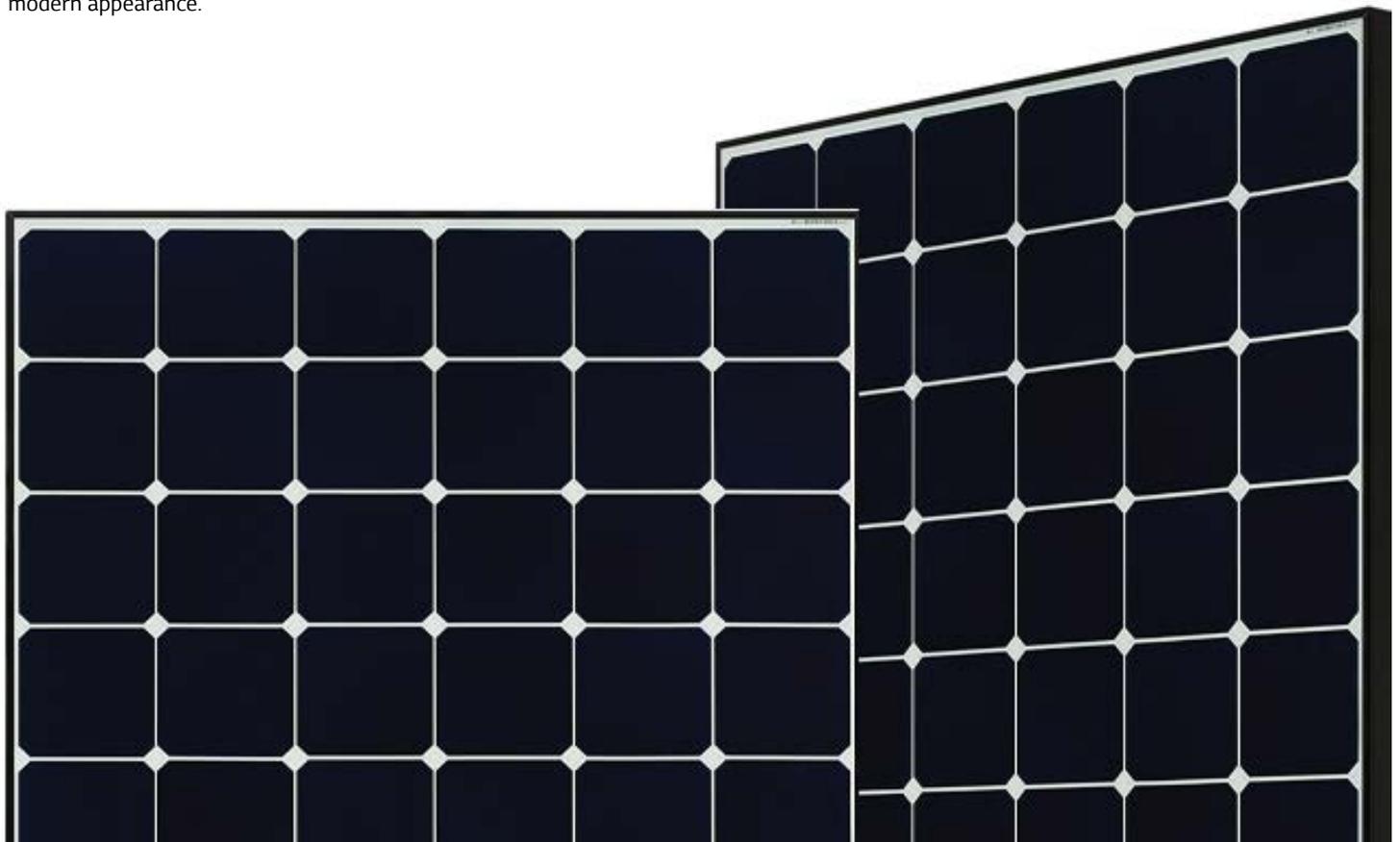


New

# LG NeON<sup>®</sup>R | LG NeON<sup>®</sup>R Prime

## High Power Output, High-Efficiency Panels

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



LG NeON<sup>®</sup>R  
66-Cell

LG NeON<sup>®</sup>R Prime  
66-Cell

## Technical Data

Product Model	LG NeON <sup>®</sup> R (QAC-A6)		LG NeON <sup>®</sup> R Prime (QAK-A6)
Cell Type	Monocrystalline / N-type		Monocrystalline / N-type
# of Cells	66 Cell (6 x 11)		66 Cell (6 x 11)
Maximum Power	<b>435W</b>	<b>440W</b>	<b>425W</b>
Module Efficiency	21.9%	22.1%	21.4%
Dimensions (L x W x H)	1,910mm x 1,042mm x 40mm		1,910mm x 1,042mm x 40mm
Weight	20.5kg		20.5kg
Frame   Backsheet	Black   White		Black   Black
Output Linear Warranty	1st year 98.5%, from 2-24th year: -0.25%/year down, 92.5% at year 25		
Product Warranty	25-Year Limited		

## LG NeON<sup>®</sup> R Features



### Near Zero LID

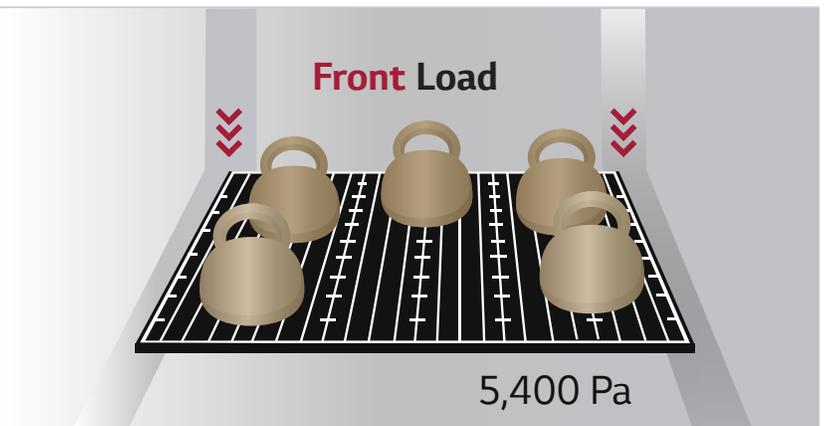
The LG NeON<sup>®</sup> R is manufactured with n-type wafers, which use phosphorus. This leads to extremely low light-induced degradation (LID) rates.



### LG NeON<sup>®</sup> R / Phosphorus in N-Type Wafers Improves LID Rates

### Long-Term Durability

All LG Solar panels feature a reinforced frame design that withstands high loads. The NeON<sup>®</sup> R models can handle a front load of 5,400 Pa and a rear load of 4,000 Pa. This is especially impressive considering our NeON<sup>®</sup> R solar panels weigh around 45 lbs or less. The NeON<sup>®</sup> R panels create less stress on your roof due to their low weight, while still offering excellent durability.



### Low Temperature Coefficient

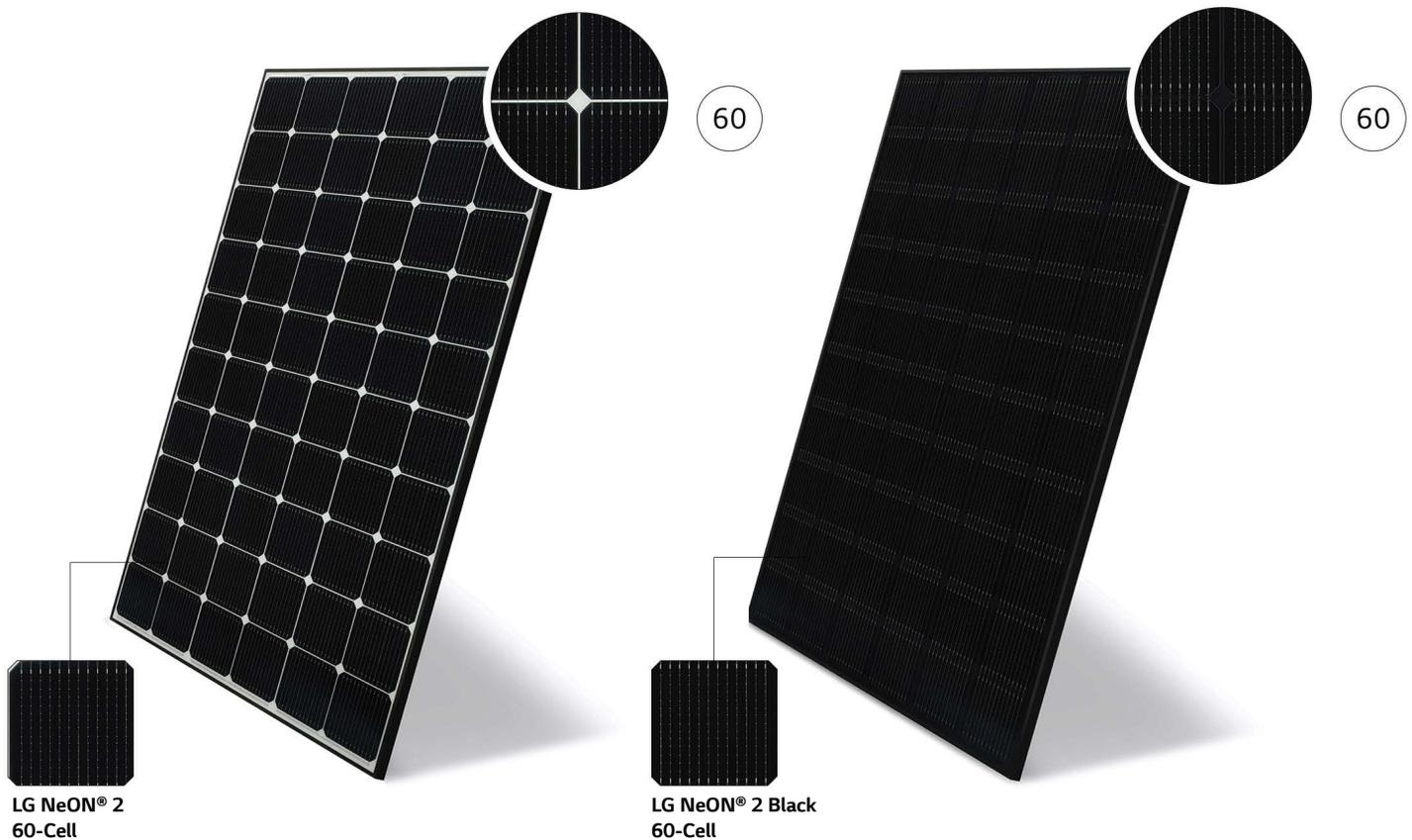
The LG NeON<sup>®</sup> R panels boast a low -0.29% temperature coefficient, which means they perform well even on hot days.



# LG NeON<sup>®</sup> 2 | LG NeON<sup>®</sup> 2 Black

LG's NeON<sup>®</sup> 2 Cello Technology maximizes current flow.

LG NeON<sup>®</sup> 2 solar panels provide high efficiency, high power output, appealing aesthetics and reliable performance. The panels incorporate Cello Technology (Cell connection with Electrically Low loss, Low stress and Optical absorption enhancement), developed by LG to increase power output and improve panel appearance.



## Technical Data

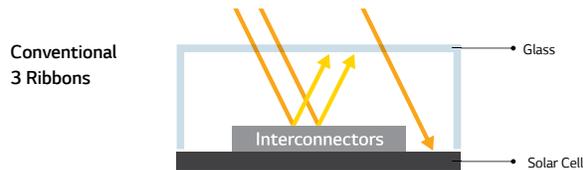
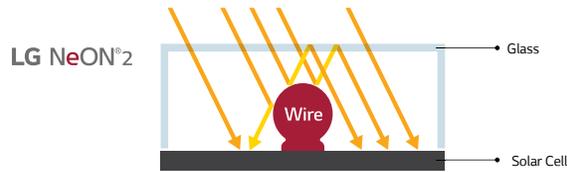
Product Model	LG NeON <sup>®</sup> 2 (N1C-A6)		LG NeON <sup>®</sup> 2 Black (N1K-A6)	
Cell Type	Monocrystalline / N-type		Monocrystalline / N-type	
# of Cells	60 Cell (6 x 10)		60 Cell (6 x 10)	
Maximum Power	<b>375W</b>	<b>380W</b>	<b>370W</b>	<b>375W</b>
Module Efficiency	20.7%	21.0%	20.4%	20.7%
Dimensions (L x W x H)	1,740mm x 1,042mm x 40mm		1,740mm x 1,042mm x 40mm	
Weight	18.6kg		18.6kg	
Frame   Backsheet	Black   White		Black   Black	
Output Linear Warranty	1st year 98.5%, from 2-24th year: 0.33%/year down, 90.6% at year 25			
Product Warranty	25-Year Limited			



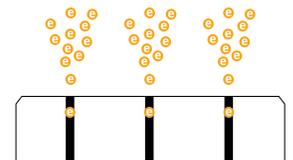
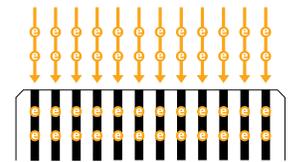
## Award-Winning Cello Technology

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

### Light Scattered More Effectively



### More Pathways for Electrons



## High-Efficiency Panels

LG NeON<sup>®</sup> 2 panels are high-efficiency panels that generate more power from the same amount of sunlight than lower-efficiency panels of the same size.

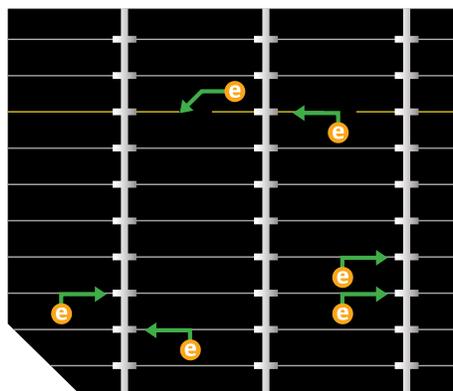
High-efficiency panels are an advantage on smaller roofs or on roofs that experience some shading. They can also leave room for array expansion in the future.



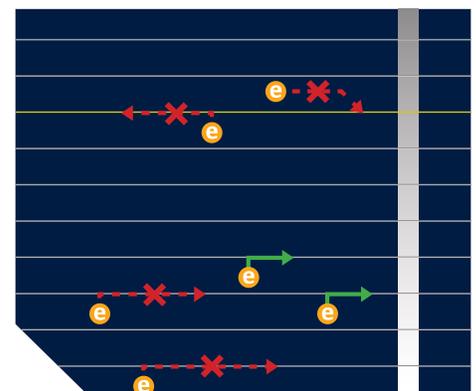
## Long-Term Reliability

Microcracks in finger electrodes may occur when there is mechanical or thermal stress on solar cells. The LG NeON<sup>®</sup> 2 is less vulnerable to performance losses due to environmental damage due to the strategic layout of wires.

### LG NeON<sup>®</sup>2



### Conventional 3 Ribbons



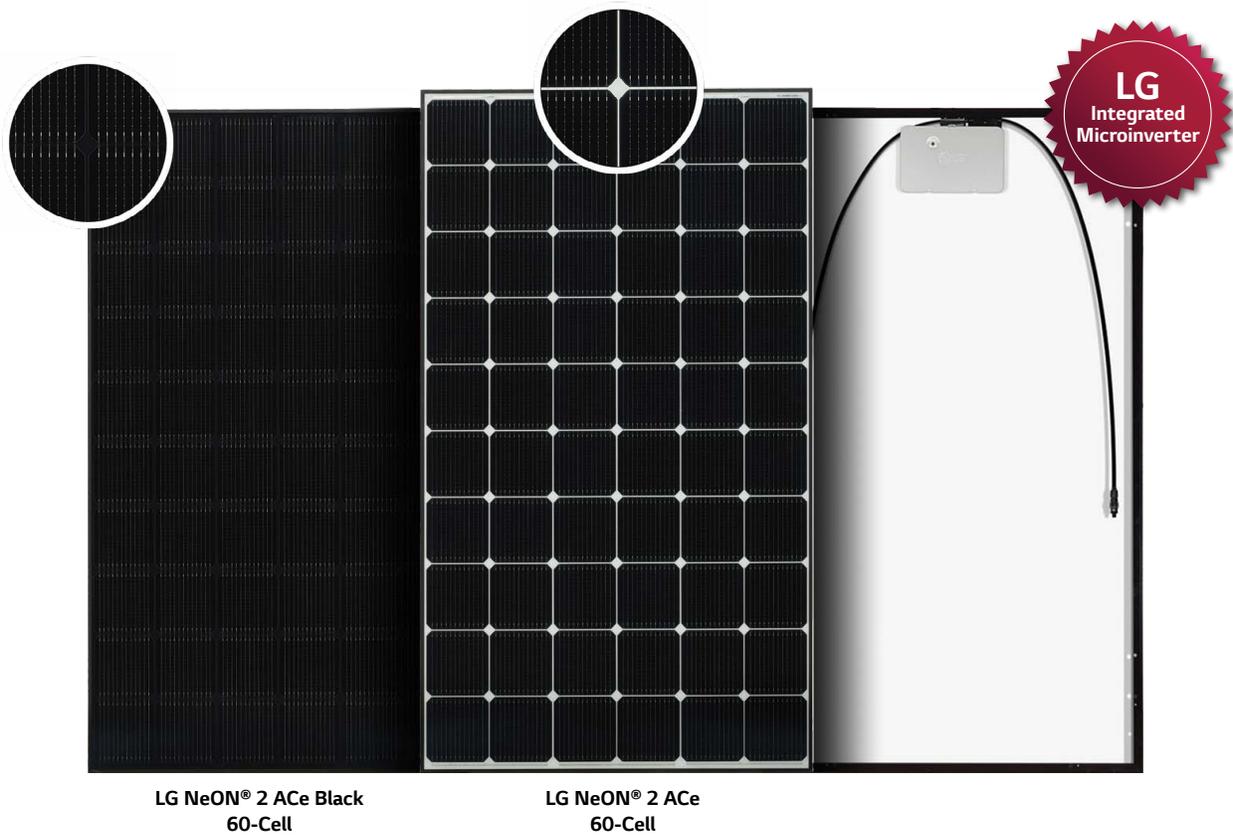
Multiple electrical paths maintained by wires

New

# LG NeON<sup>®</sup> 2 ACe

Individual solar panels can be managed in real time, in the palm of your hand.

LG's NeON<sup>®</sup> 2 ACe is an integrated solar panel and microinverter in one designed for easy installation and use. The ACe is a smart AC panel that is easy to install and monitor, provides increased flexibility for array design and is an excellent solution for home installation. This panel is easily managed with LG EnerVu software via the internet. When a problem occurs, it can be easily solved by tracking each individual panel through its microinverter.



## Technical Data

Product Model	LG NeON <sup>®</sup> 2 ACe (M1C-A6)			LG NeON <sup>®</sup> 2 ACe Black (M1K-A6)		
Cell Type	Monocrystalline / N-type			Monocrystalline / N-type		
# of Cells	60 Cell (6 x 10)			60 Cell (6 x 10)		
Maximum Power	<b>375W</b>	<b>380W</b>	320W (Wac) Microinverter	<b>370W</b>	<b>375W</b>	320W (Wac) Microinverter
Module Efficiency	20.7%	21.0%		20.4%	20.7%	
Dimensions (L x W x H)	1,740mm x 1,042mm x 40mm			1,740mm x 1,042mm x 40mm		
Weight	20.2kg			20.2kg		
Frame   Backsheet	Black   White			Black   Black		
Output Linear Warranty	1st year 98.5%, from 2-24th year: 0.33%/year down, 90.6% at year 25					
Product Warranty	25-Year Limited					

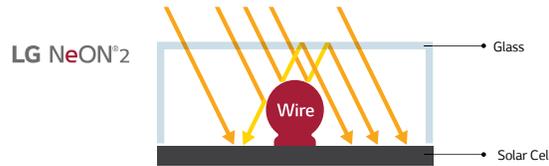
# LG NeON® 2 ACe Features



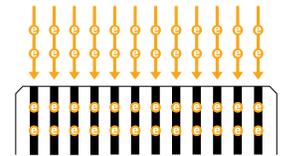
## Award-Winning Cello Technology

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

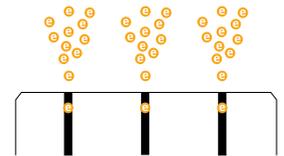
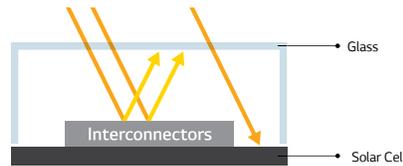
### Light Scattered More Effectively



### More Pathways for Electrons



### Conventional 3 Ribbons



## 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 panels 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 makes it easy to register panels on the system.

LG EnerVu, an energy monitoring/installation system, not only provides simple monitoring, but it gives detailed analysis of power production, self-consumption, electricity bill savings, sales volume, identification of issues related to power companies, and serves as a personalized installation guide.

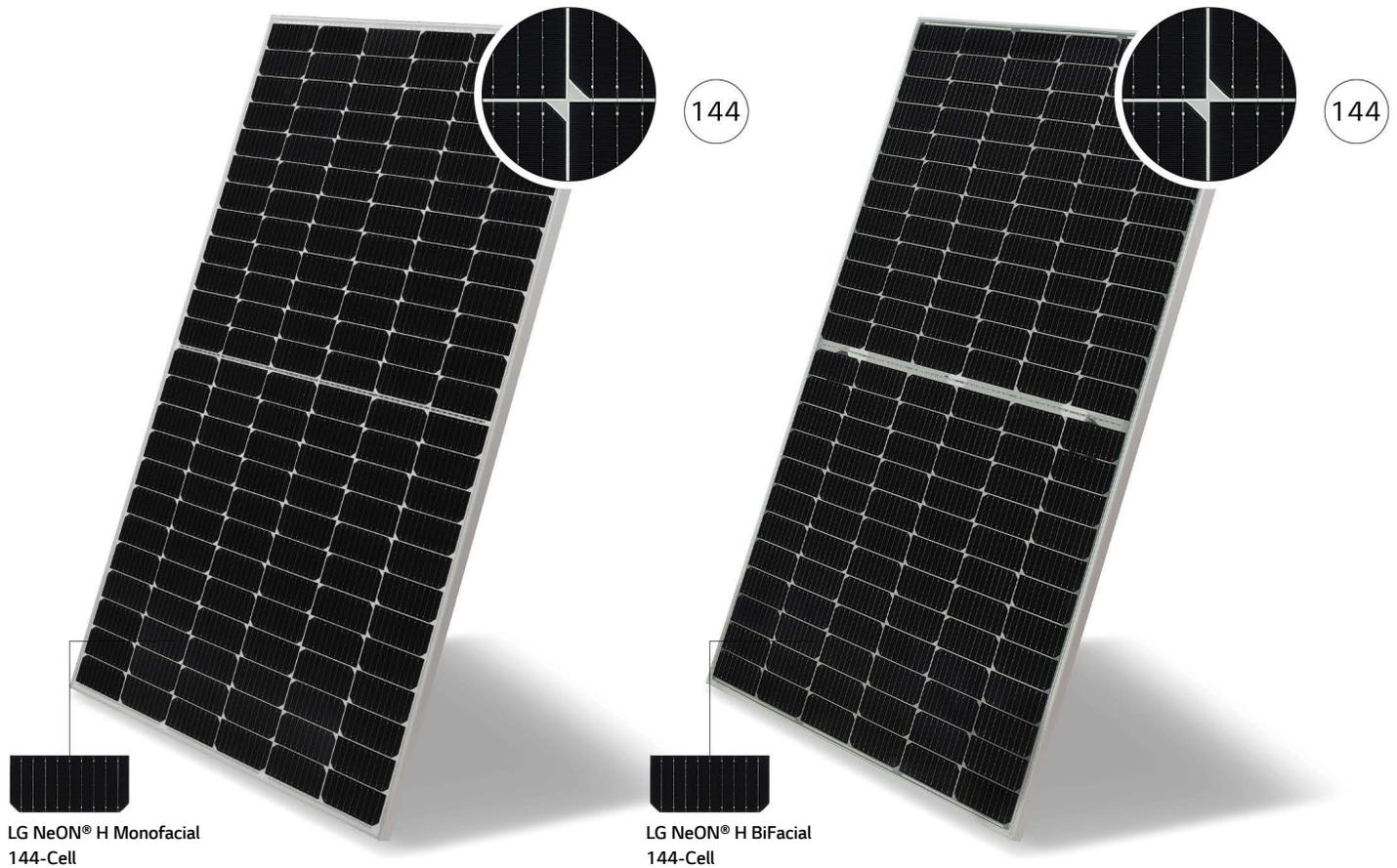


New

# LG NeON<sup>®</sup>H | LG NeON<sup>®</sup>H BiFacial

## Double-Sided Generation

The LG NeON<sup>®</sup>H BiFacial has a double-sided cell structure with a transparent back sheet. Panels generate energy from the front and back side.



## Technical Data

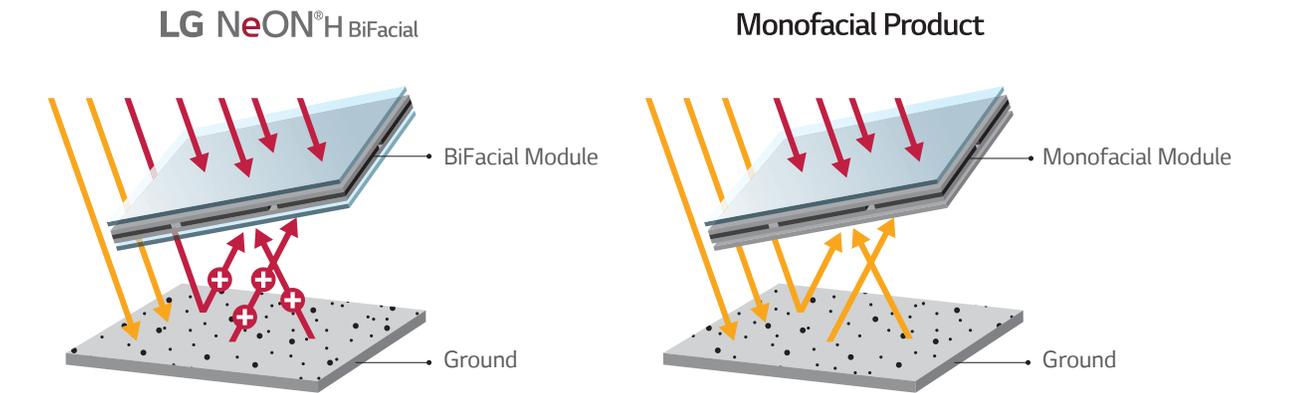
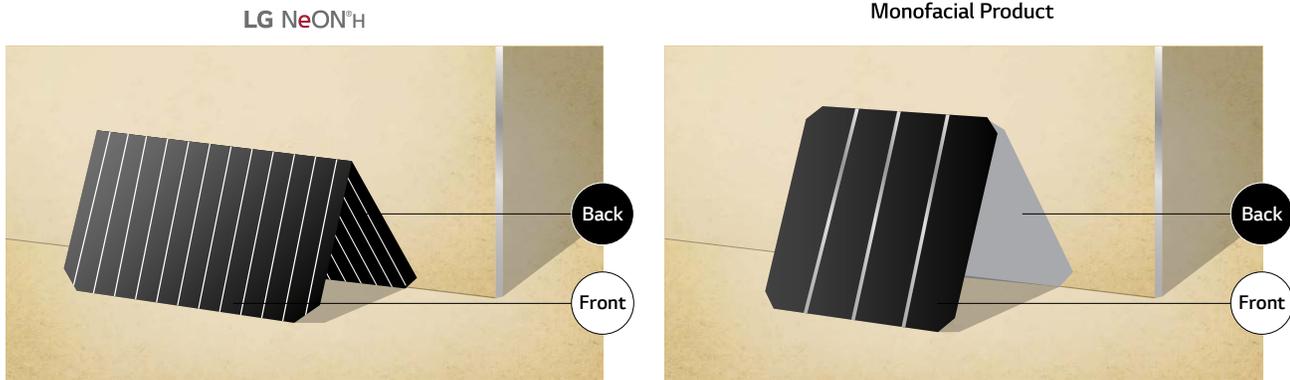
Product Model	LG NeON <sup>®</sup> H Monofacial (N2W-E6)		LG NeON <sup>®</sup> H BiFacial (N2T-E6)	
Cell Type	Monocrystalline / N-type		Monocrystalline / N-type BiFacial	
# of Cells	144 Half-Cut Cells (6 x 24)		144 Half-Cut Cells (6 x 24)	
Maximum Power	<b>445W</b>	<b>450W</b>	<b>400W</b>	<b>435W</b>
Module Efficiency (BiFi 100)	20.2%	20.5%	21.0%	21.2%
Dimensions (L x W x H)	2,110mm x 1,042mm x 40mm		2,110mm x 1,042mm x 40mm	
Weight	23kg		23kg	
Frame   Backsheet	Silver   White		Silver   Transparent	
Output Linear Warranty (BiFi 100)	Initial 107%, 1st year 105.4%, After 1st year : -0.35%/year, 96.9% at year 25			
Product Warranty	25-Year Limited			

# LG NeON<sup>®</sup> H Features



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

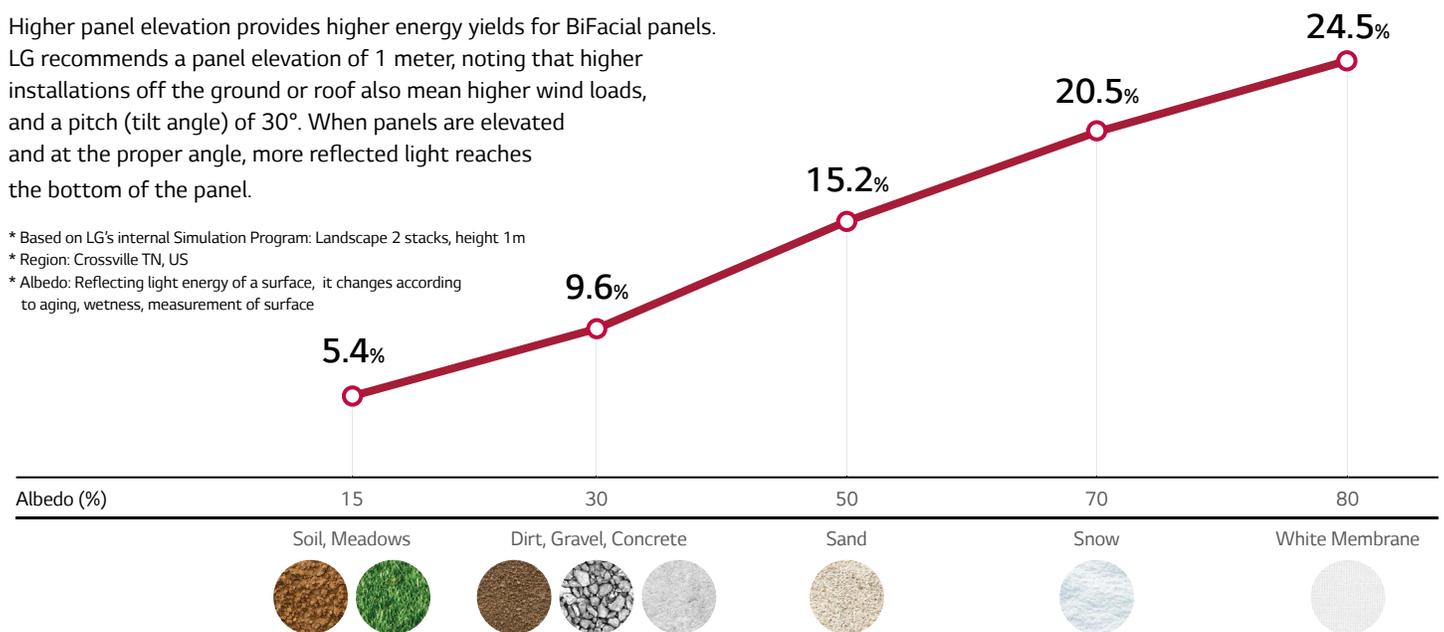
Using a NeON<sup>®</sup> cell that can generate energy on both sides, LG developed a panel for bifacial generation.

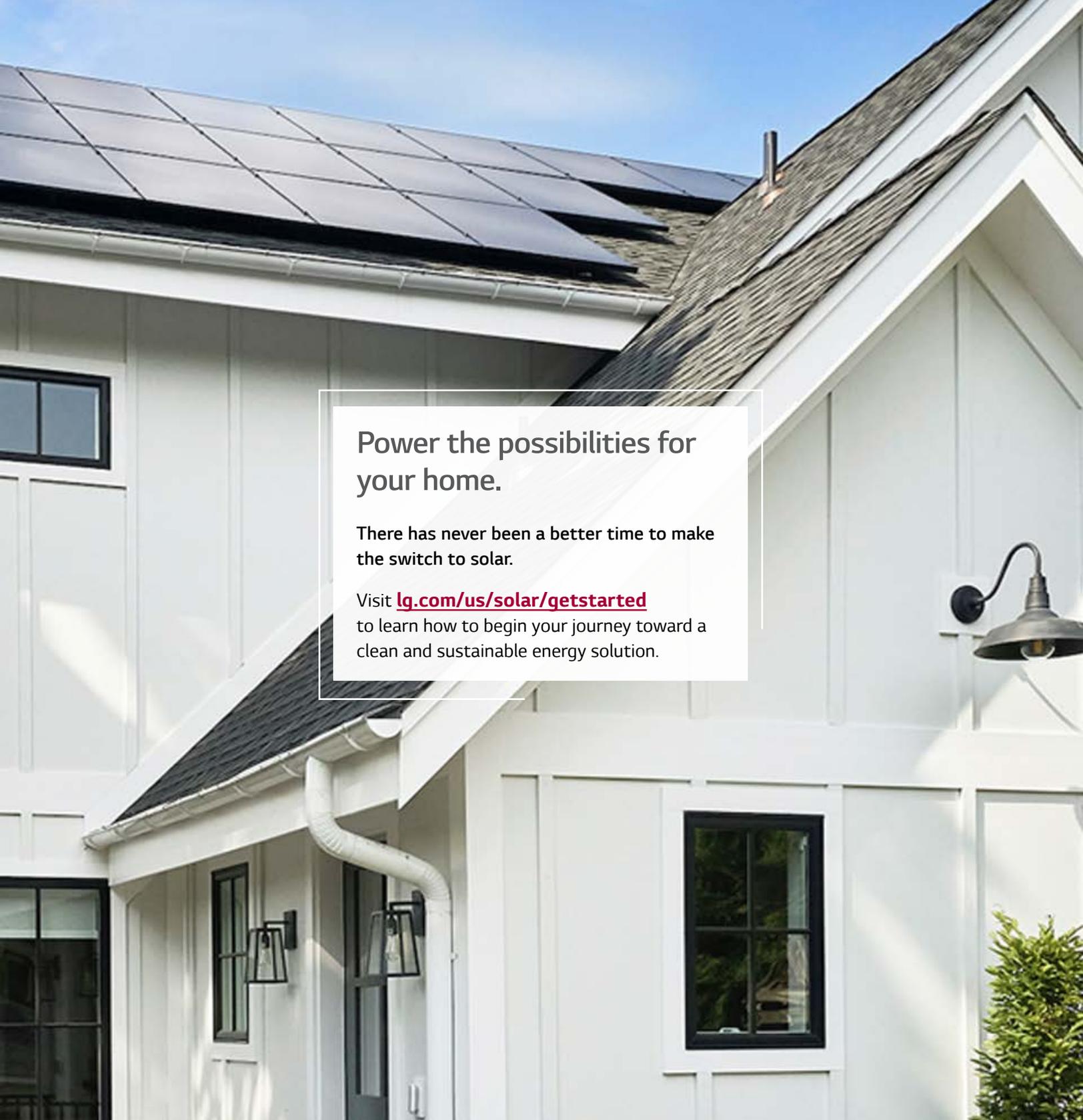


## Panel Elevation and Pitch

Higher panel elevation provides higher energy yields for BiFacial panels. LG recommends a panel 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 panels 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





## Power the possibilities for your home.

There has never been a better time to make  
the switch to solar.

Visit [lg.com/us/solar/getstarted](https://www.lg.com/us/solar/getstarted)  
to learn how to begin your journey toward a  
clean and sustainable energy solution.

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