

Innovation for a Better Life

LG SOLAR

LG Electronics Inc.

LG Twin Towers, 128 Yeoui-daero, Yeongdeungpo-gu, Seoul, 07336, Korea

<http://lg-solar.com>

Copyright © 2018 LG Electronics. All rights reserved.
CT-ET-GL-EN-F-80525

* The contents can be changed without notice.

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

Why LG Solar?

- Brand Power
- Leading Technology
- Quality

LG NeON® Series

- LG NeON® R
- LG NeON® 2 / LG NeON® 2 Black
- LG NeON® 2 BiFacial

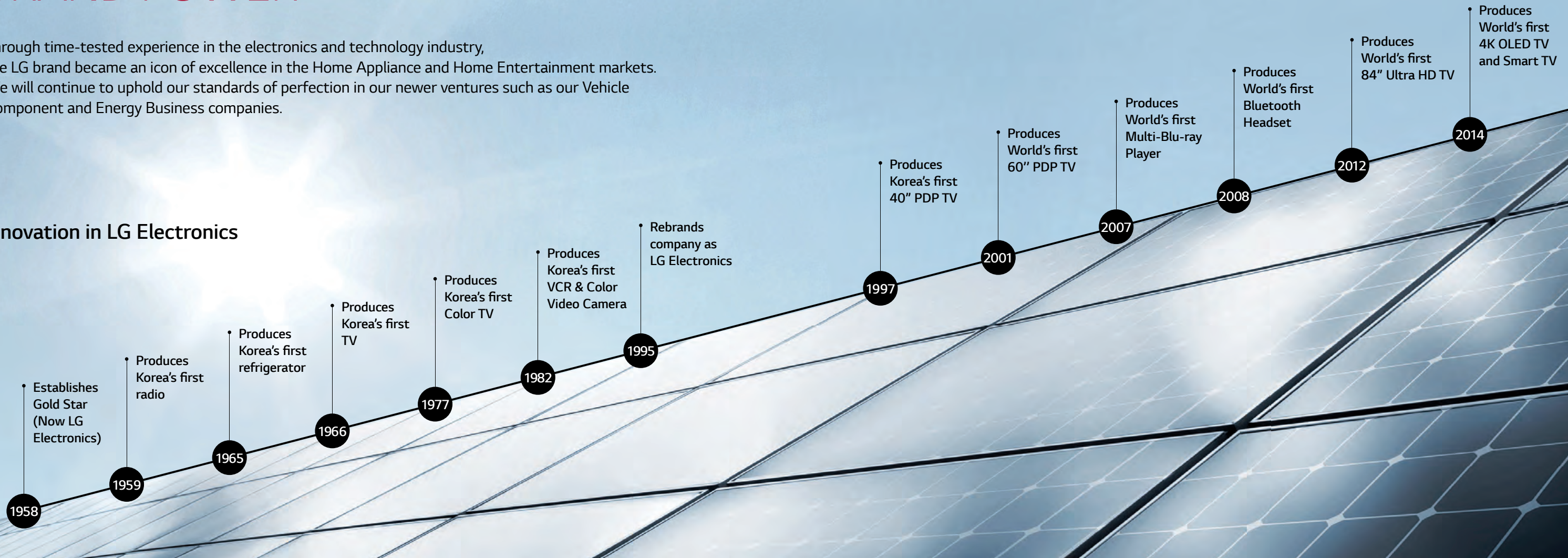
Reference

Contact Us

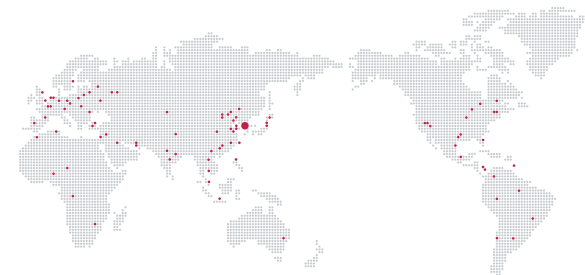
BRAND POWER

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

\$55.4 billion(2017)

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

Workforce

75,150

World Presence

118 Global Operations

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

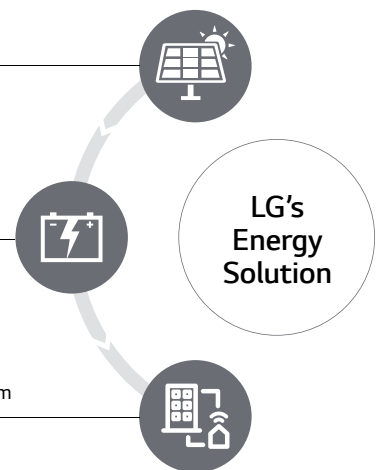
High efficiency module that generates more energy

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 MonoX® Series
235

255

265

LG NeON® Series
290

270

280

300

315

285

320

290

300

LG MonoX® Plus
17.5% efficiency

335

365

370

LG NeON® R
21.4% efficiency

340

LG NeON® 2
19.8% efficiency

Year

2010

2011

2012

2013

2014

2015

2016

2017

2018

* To be launched in 4th quarter

LG Solar Awards & Innovation in Technology

2013



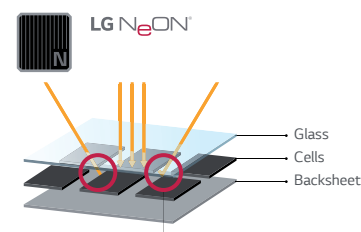
Intersolar Award 2013 [Winner]



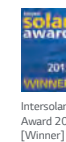
Plus X Award 2013 [High Quality, Ecology]

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]



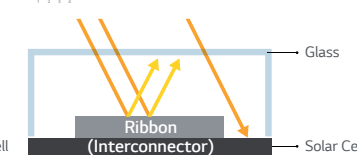
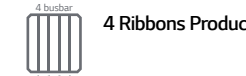
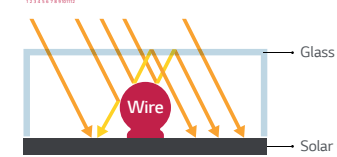
EUPD Research Top Brand [Module] 2015



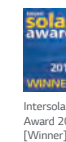
Plus X Award 2015 [High Quality, Functionality, Ecology]

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.



2016 / 2017



Intersolar Award 2016 [Winner]



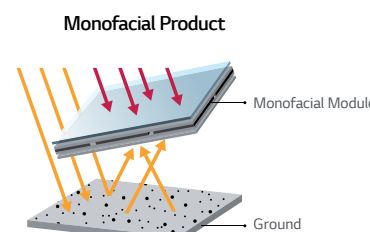
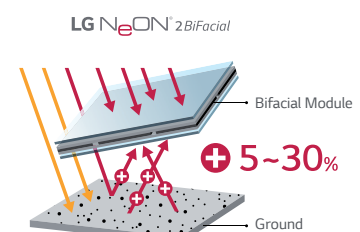
EUPD Research Top Brand [Module] 2016



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.

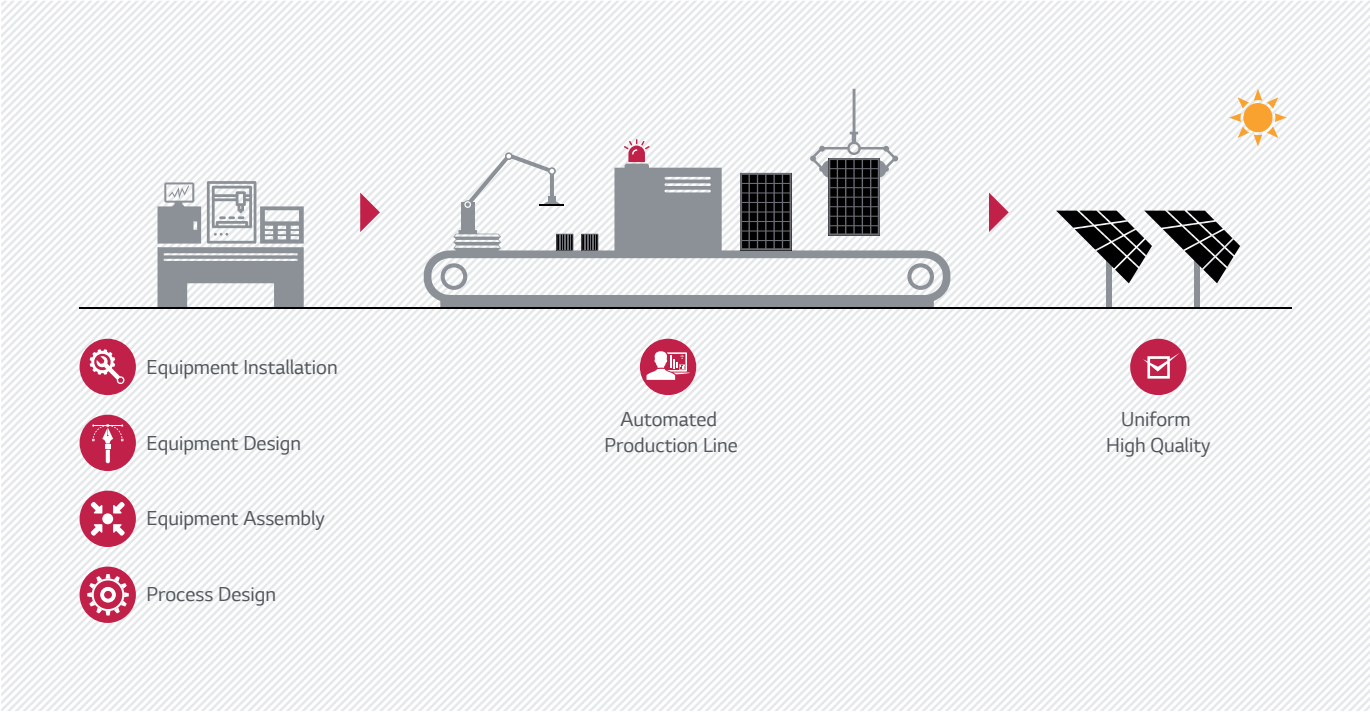


QUALITY

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.

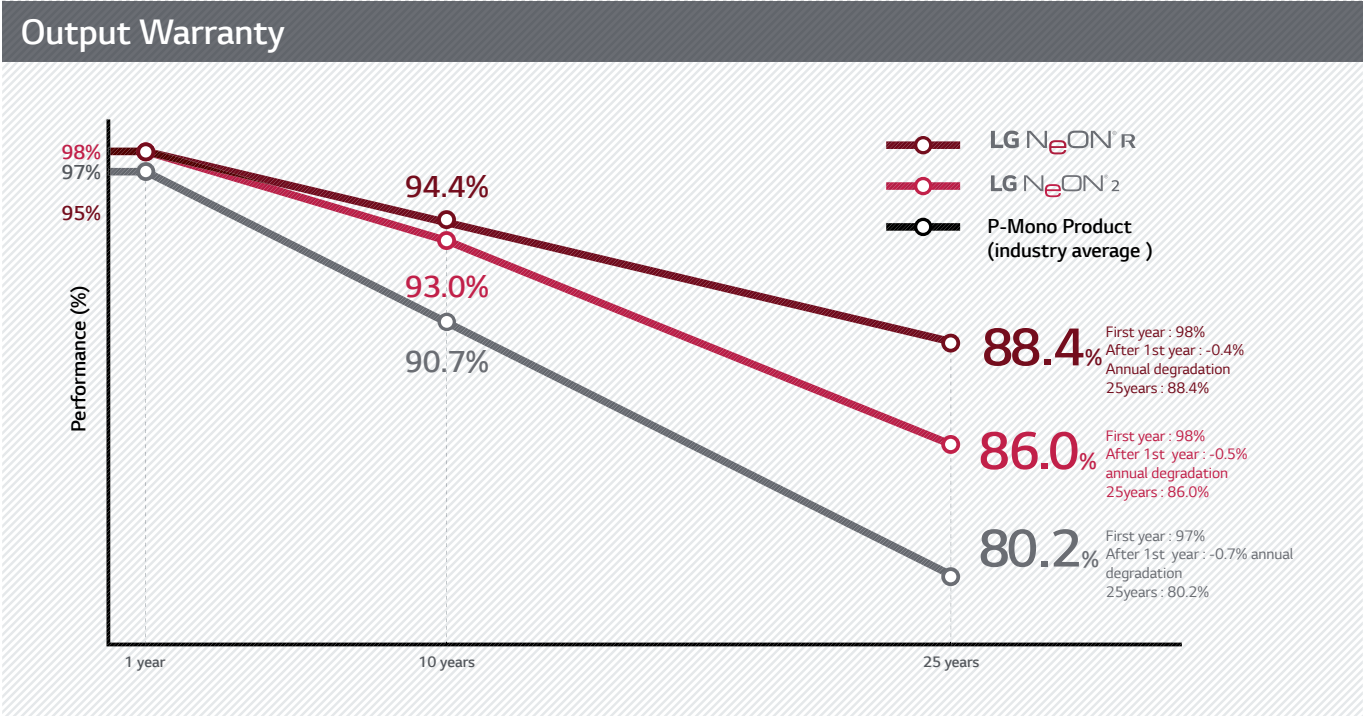
Operational Excellence & Testing Facilities

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.

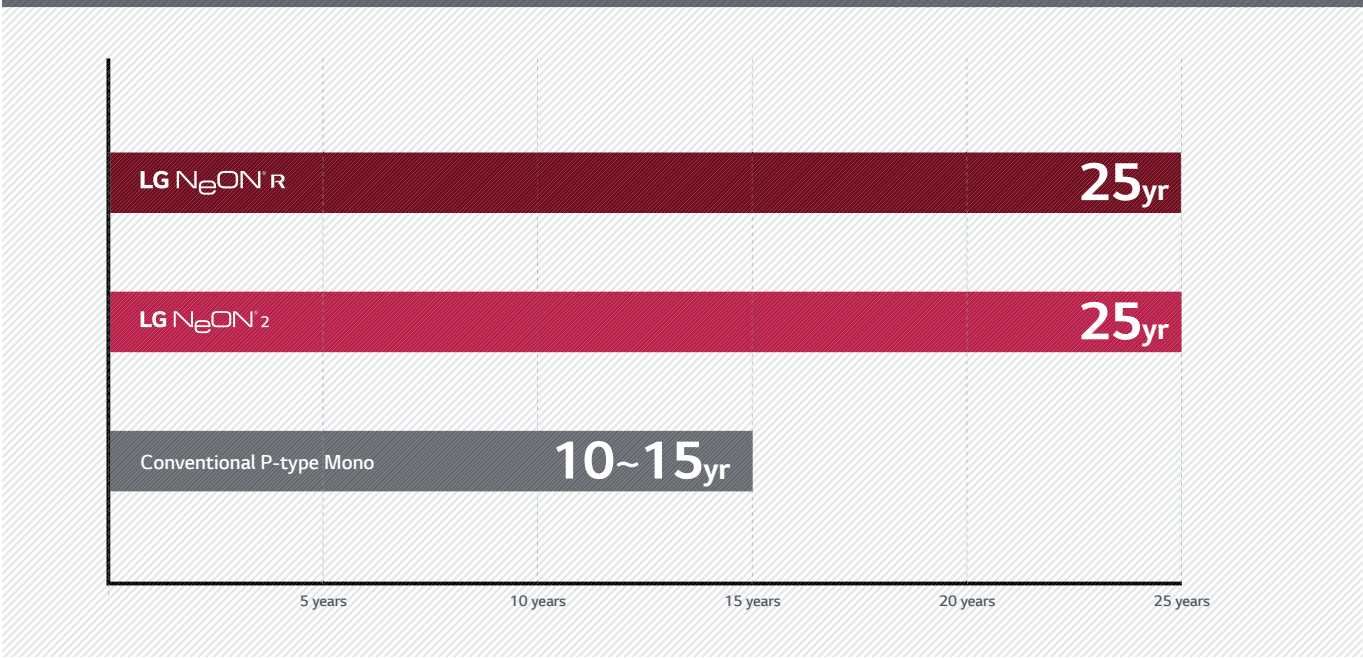


Superior Performance Warranty

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



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.



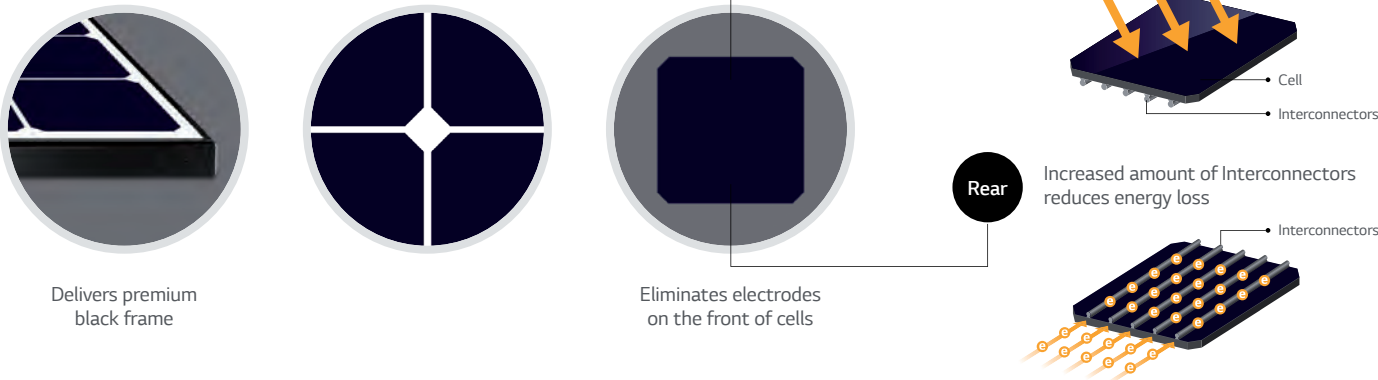
Technical Data

Product Model		LG NeON® R 60cell	
Cell Type		Monocrystalline / N-type	
# of Cells		60cell (6 x 10)	
Maximum Power		370W	365W
Module Efficiency		21.4%	21.1%
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

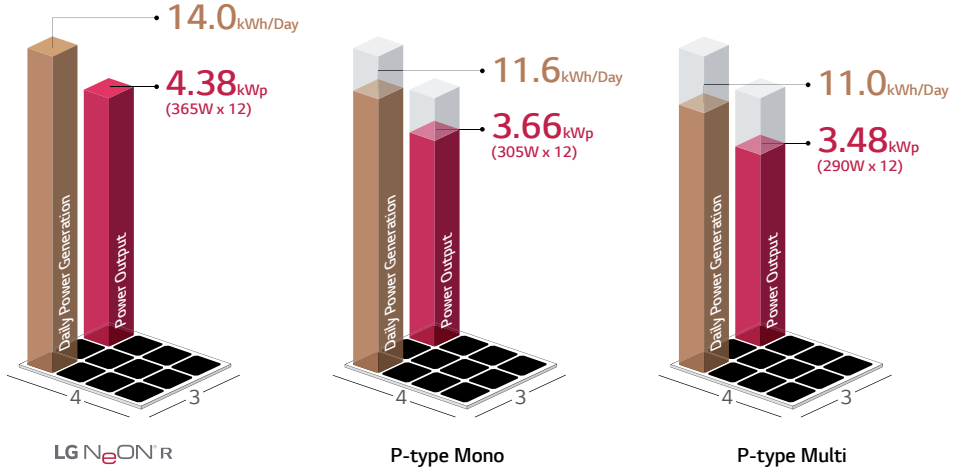
Technical Feature

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.



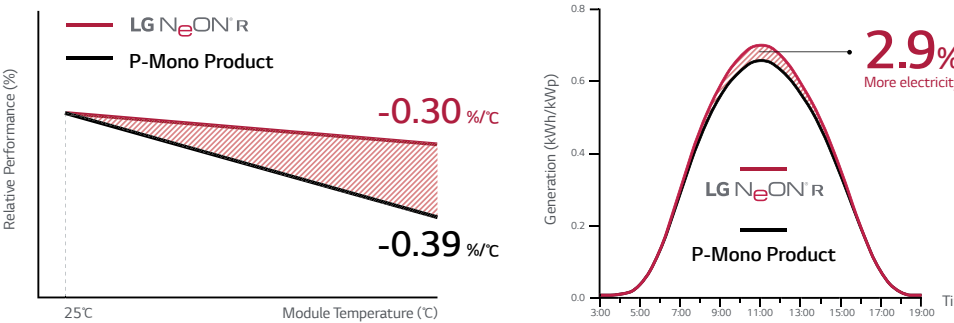
* PV Syst simulation result
* Region : Bayern München, Germany
* Data source : Pan file, Datasheet

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.

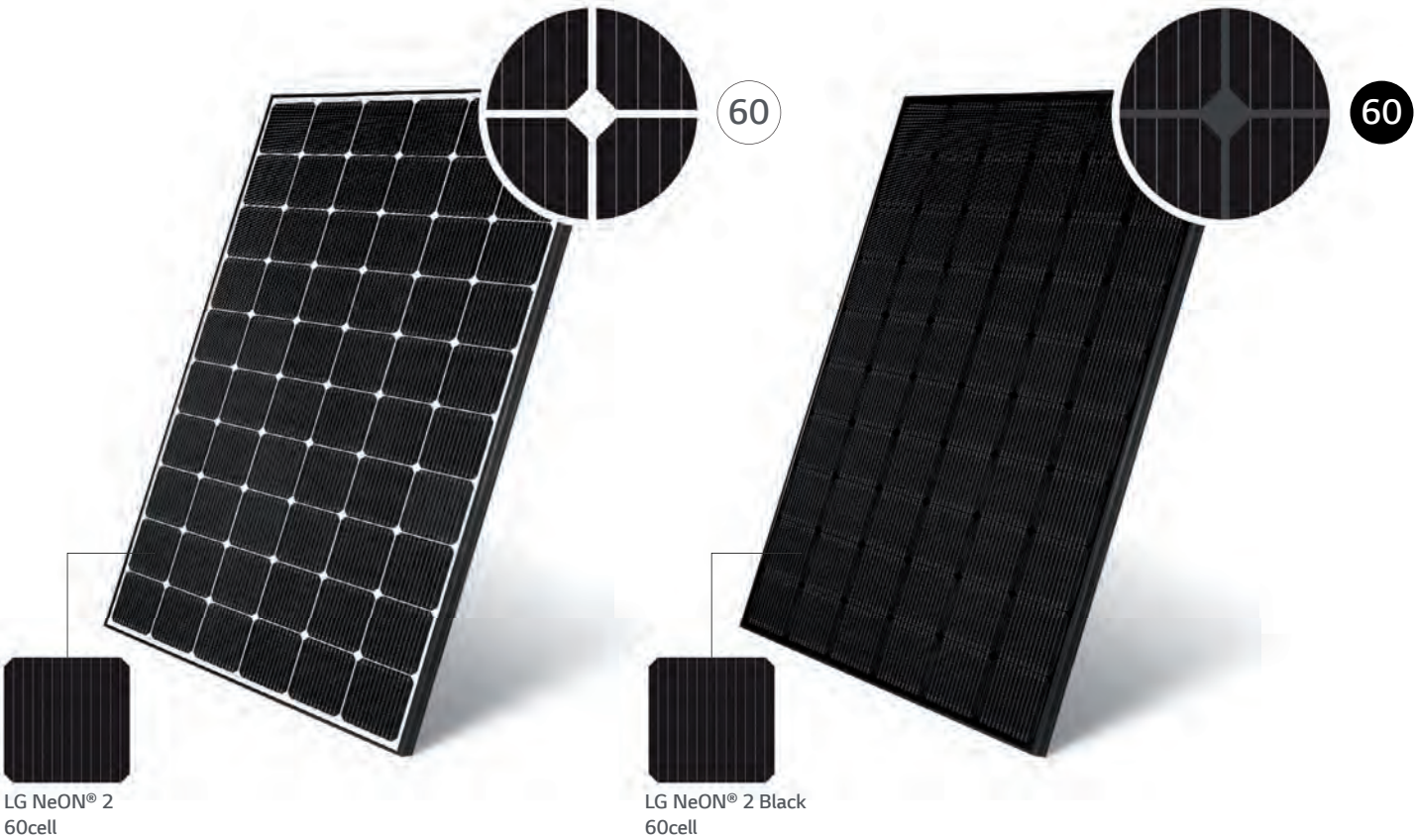
* PV Syst simulation result
* Region : Bayern München, Germany
* One day in July (Highest temperature in a day : 32°C)
* Data source : Pan file, Datasheet



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.

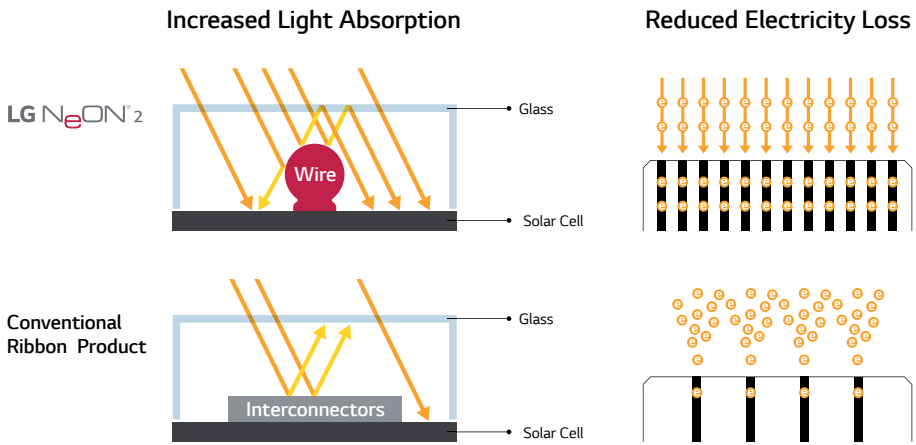
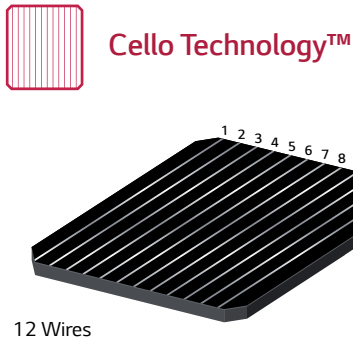


Technical Data

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, 25years : 86%)		
Product Warranty	25years		

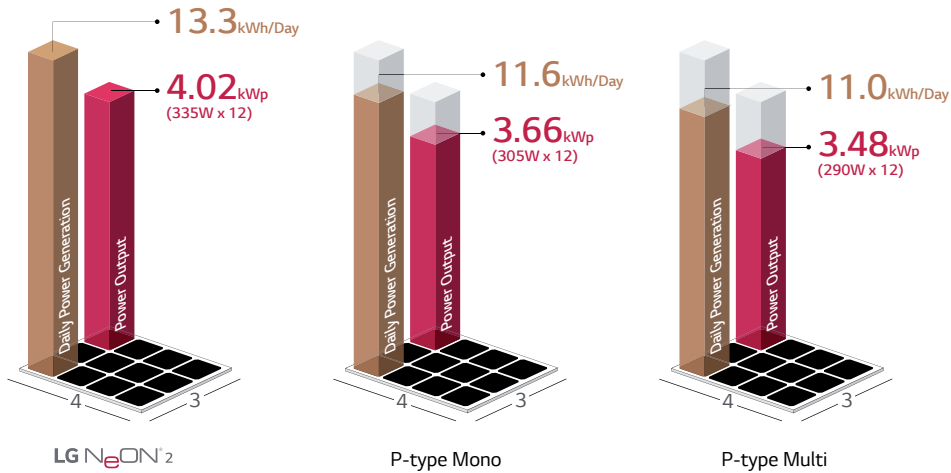
Features

Technical Feature



High Power Module

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

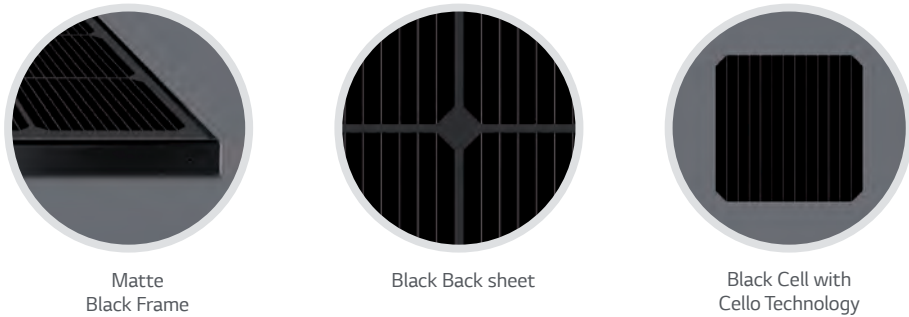


* PV Syst simulation result
* Region : Bayern München, Germany
* Data source : Pan file, Datasheet

Power Output Comparison of 12-module arrays

Aesthetic Black module

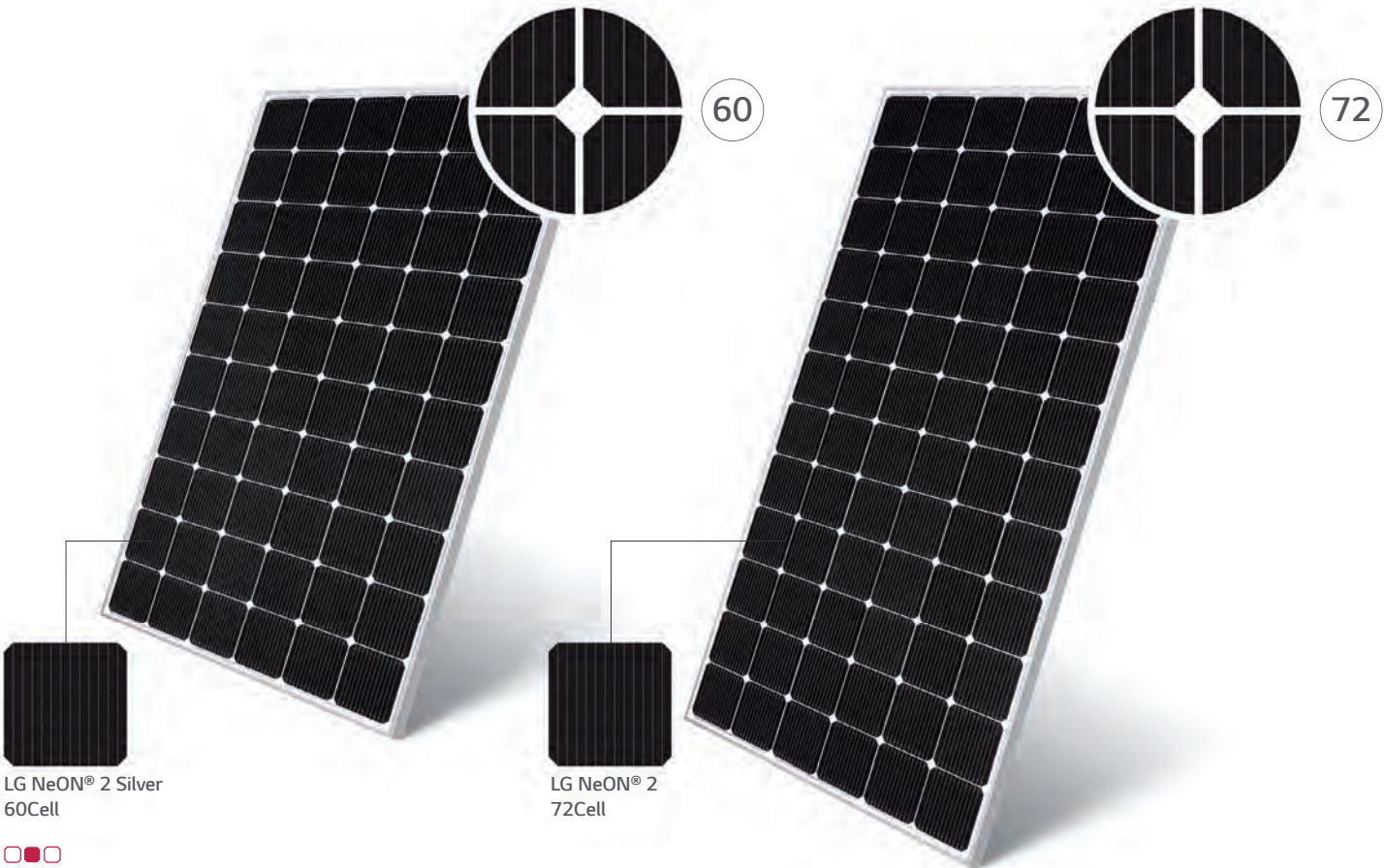
The LG NeON® 2 black is equipped with a sophisticated matte black frame and a complementary black back sheet, and black cells with thin electrodes. This module is perfectly suited to any rooftop.



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.



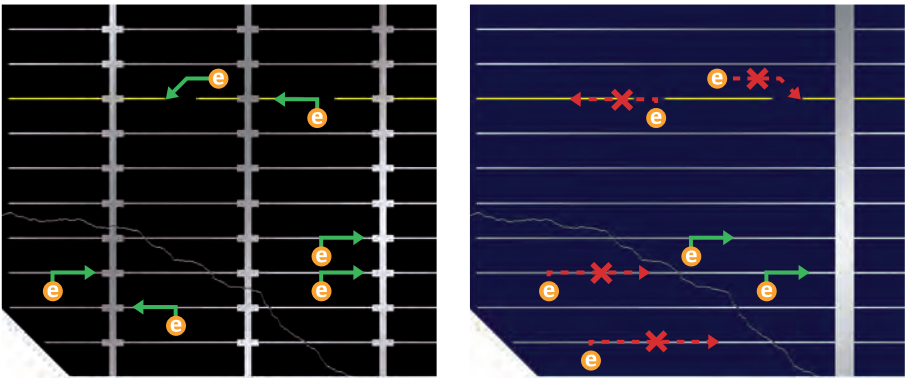
Technical Data

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

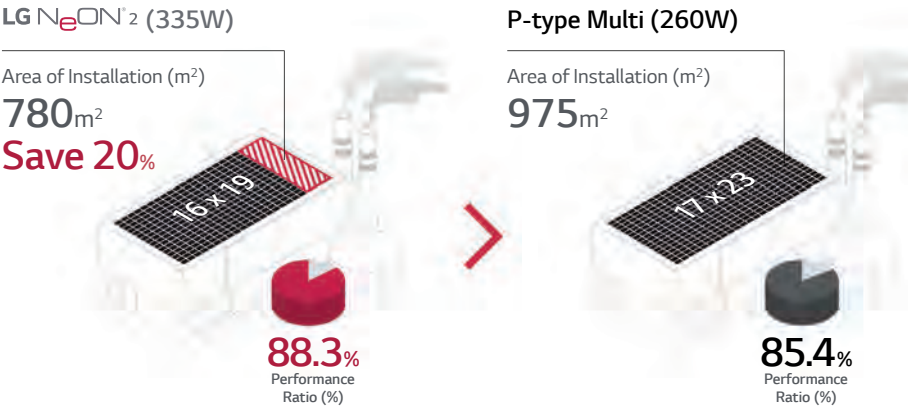
When micro-cracks or finger electrode erosion occurs due to outside factors, LG NeON[®] 2 reduces down performance by blocking the electrical path due to the layout of wires.



Multiple electrical paths maintained by wires

High Power Module

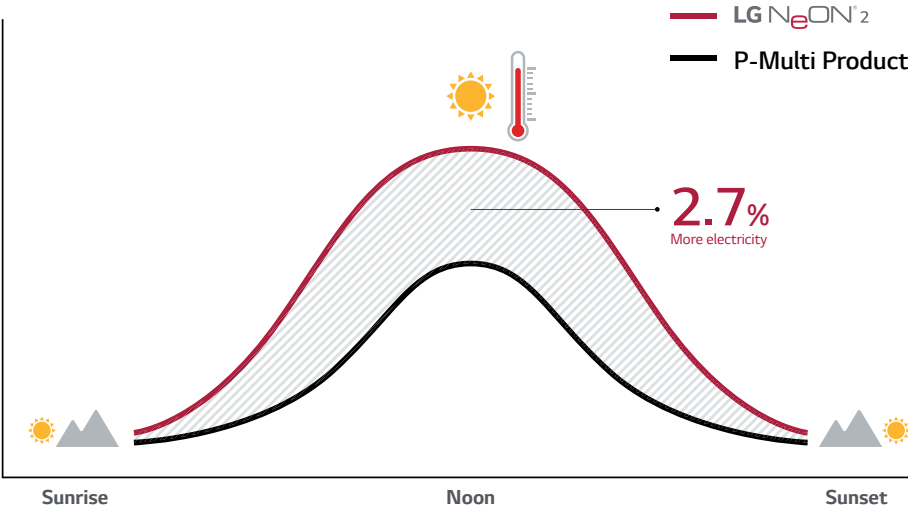
The LG NeON[®] 2 produces more energy than Conventional P-type Multi modules allowing energy requirements to be met using less space.



* 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.



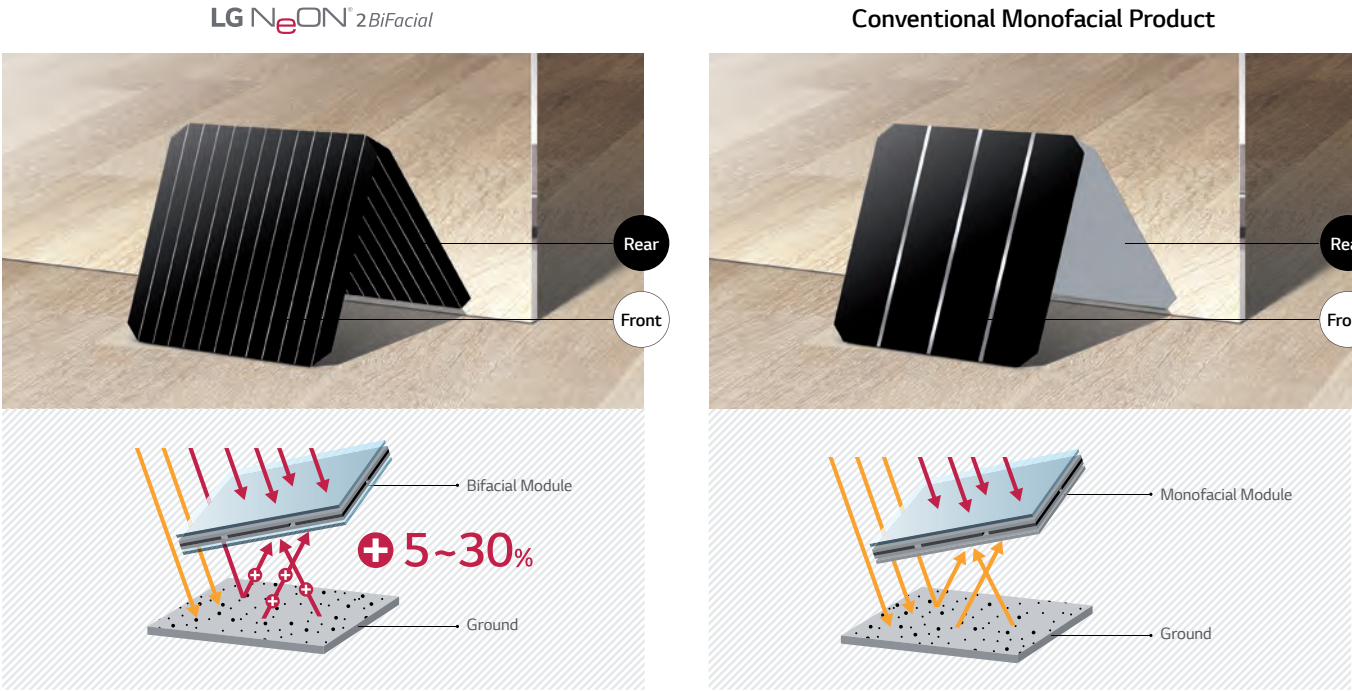
Technical Data

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	

Features

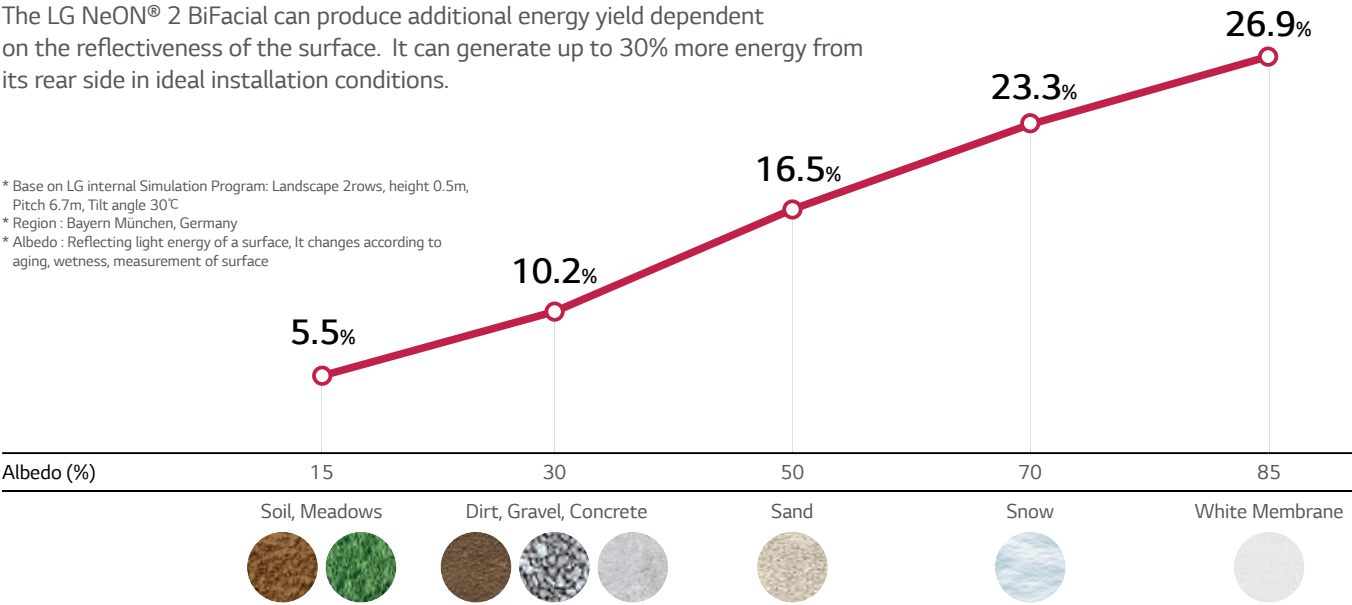
N-type Cell (double-sided generation cell structure)

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.



REFERENCE

Residential



USA



Thailand_Bangkok



Netherland_Venlo



Thailand_Bangkok



Germany_Leipzig



Germany_Grasberg



Switzerland_Koliken

REFERENCE

Commercial

Utility



Thailand_Bangkok



USA_Easton



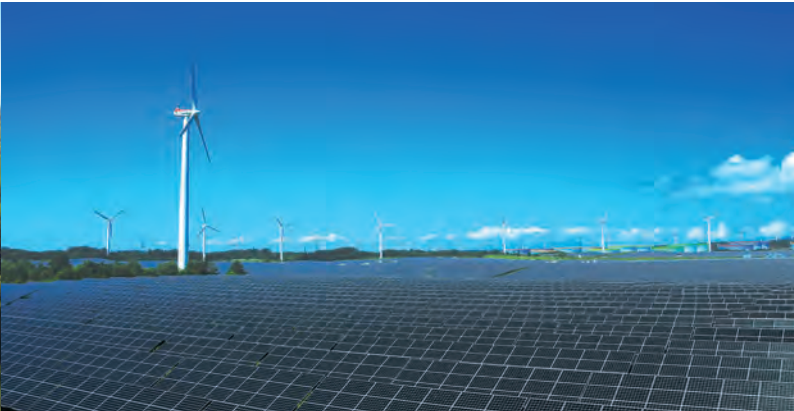
Australia_Sydney



Korea_Sejong



Japan_Hokkaido



Japan_Aomori

PRODUCT LINE-UP

LG NeON® R



LG NeON® R
60Cell

370W
365W
360W

LG NeON® 2



LG NeON® 2
60Cell

340W
335W
330W



LG NeON® 2 Black
60Cell

320W



LG NeON® 2 72Cell

400W
395W

LG NeON® 2BiFacial



LG NeON® 2 BiFacial
72Cell

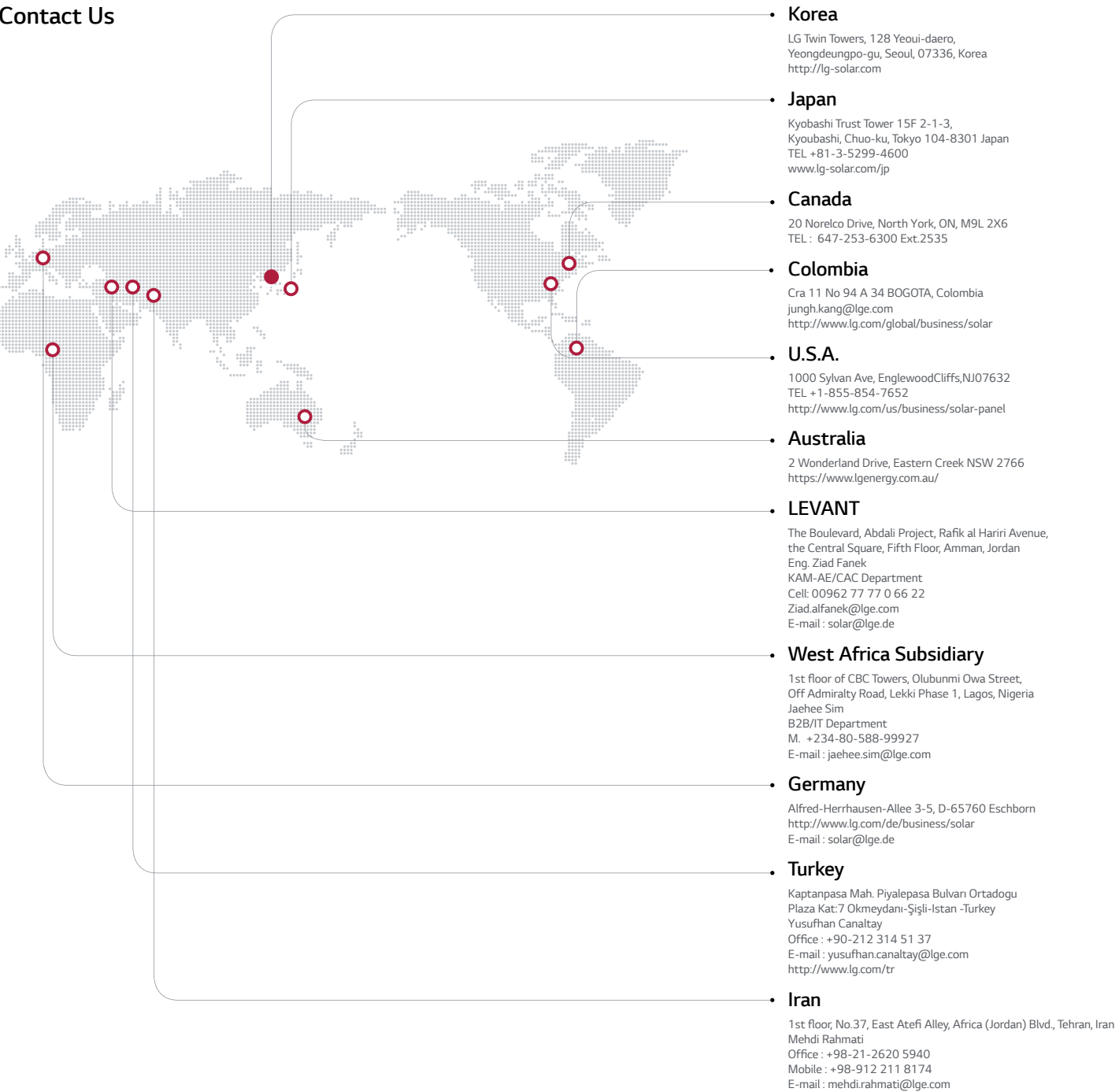
395W
390W

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.

Contact Us



- Korea**
LG Twin Towers, 128 Yeoui-daero,
Yeongdeungpo-gu, Seoul, 07336, Korea
<http://lg-solar.com>
- Japan**
Kyobashi Trust Tower 15F 2-1-3,
Kyobashi, Chuo-ku, Tokyo 104-8301 Japan
TEL +81-3-5299-4600
www.lg-solar.com/jp
- Canada**
20 Norelco Drive, North York, ON, M9L 2X6
TEL : 647-253-6300 Ext.2535
- Colombia**
Cra 11 No 94 A 34 BOGOTA, Colombia
jungh.kang@lge.com
<http://www.lg.com/global/business/solar>
- U.S.A.**
1000 Sylvan Ave, EnglewoodCliffs,NJ07632
TEL +1-855-854-7652
<http://www.lg.com/us/business/solar-panel>
- Australia**
2 Wonderland Drive, Eastern Creek NSW 2766
<https://www.lgenergy.com.au/>
- LEVANT**
The Boulevard, Abdali Project, Rafik al Hariri Avenue,
the Central Square, Fifth Floor, Amman, Jordan
Eng. Ziad Fanek
KAM-AE/CAC Department
Cell: 00962 77 77 0 66 22
Ziad.alfanek@lge.com
E-mail : solar@lge.de
- West Africa Subsidiary**
1st floor of CBC Towers, Olubunmi Owa Street,
Off Admiralty Road, Lekki Phase 1, Lagos, Nigeria
Jaehee Sim
B2B/IT Department
M. +234-80-588-99927
E-mail : jaehee.sim@lge.com
- Germany**
Alfred-Herrhausen-Allee 3-5, D-65760 Eschborn
<http://www.lg.com/de/business/solar>
E-mail : solar@lge.de
- Turkey**
Kapitanpasa Mah. Piyalepasa Bulvarı Ortadoğu
Plaza Kat:7 Okmeydanı-Şişli-Istan -Turkey
Yusufhan Canaltay
Office : +90-212 314 51 37
E-mail : yusufhan.canaltay@lge.com
<http://www.lg.com/tr>
- Iran**
1st floor, No.37, East Atefi Alley, Africa (Jordan) Blvd., Tehran, Iran
Mehdi Rahmati
Office : +98-21-2620 5940
Mobile : +98-912 211 8174
E-mail : mehdi.rahmati@lge.com