THE NEW HIGH PERFORMANCE CHAMPION LG NeON®R



**HIGHLIGHT 2018** 

**UP TO 370 WATTS** 

CONTACTLESS CELLFRONT

**AESTHETIC DESIGN** 







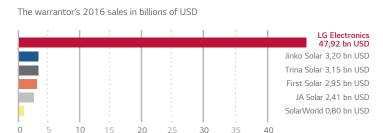
## LG NeON® R - PERFORMANCE & DESIGN WITH PASSION

The LG NeON® R is the new high-performance solar module from LG. Its aesthetic design and outstanding performance of up to 370 Wp is a valuable addition to any roof. The 60 cell solar module can endure a static front load up to 6,000Pa, has an expanded product warranty of 25 years and a once-again improved linear performance warranty.

## LOCAL GUARANTOR, GLOBAL SECURITY

LG Solar is part of LG Electronics, a global and financially strong company, with over 50 years of experience.

**Good to know:** LG Electronics is the warrantor for your solar modules.

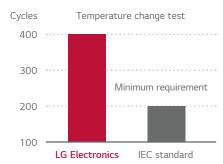


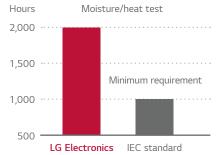
## EXCELLENT QUALITY, INDEPENDENTLY TESTED

You can rely on LG. We test our products with double the intensity specified in the IEC standard. This quality is valued by installers across Europe, which is why

they have awarded our LG solar modules the Top Brand PV stamp of quality for the highest recommendation rates for the fourth time in a row.

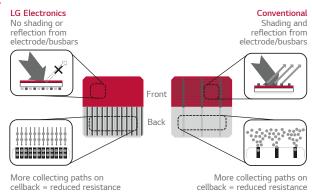






## STRONG DESIGN, POWERFUL PERFORMANCE

The busbars on the new LG NeON® R were mounted on the rear of the cells to expose the entire front side to light and therefore generate more electricity. LG creates an innovative and aesthetic cell design by incorporating 30 rear-side busbars instead of the 3 or 4 standard busbars on the cell front, a revolutionary approach that guarantees outstanding module performance.



## POWERFUL DESIGN, GUARANTEED ROBUST

With reinforced frame design, LG NeON® R can endure a front load up to 6,000Pa (represents snow height of normal snow of more than 1.8 meters) and a rear load up to 5,400Pa (represents wind speed of up to 93 m/s, compare max. wind speed of Hurricane Katrina 2005 of max. 75 m/s).



LG NeON®R

LG370Q1C-A5 LG365Q1C-A5 LG360Q1C-A5

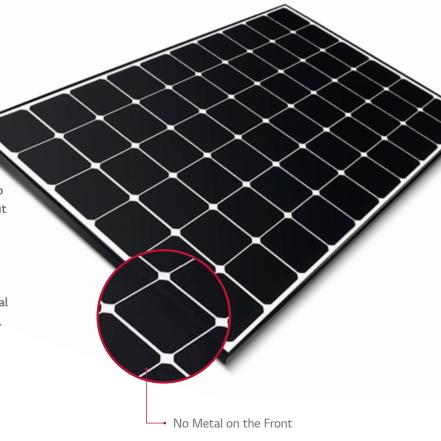
# 60 cell

LG NeON® R is new powerful product with global top level performance. Applied new cell structure without electrodes on the front, LG NeON® R maximized the utilization of light and enhanced its reliability LG NeON® R demonstrates LG's efforts to increase customer's values beyond efficiency. It features enhanced warranty, durability, performance under real environment, and aesthetic design suitable for roofs.









## KFY FFATURES



#### **Enhanced Performance Warranty**

LG NeON® R has an enhanced performance warranty. After 25 years, LG NeON® R is guaranteed at least 88.4% of initial performance.



#### Aesthetic Roof

LG NeON® R has been designed with aesthetics in mind: no electrode on the front that makes new product more aesthetic. LG NeON® R can increase the value of a property with its modern design.



#### Better Performance on a Sunny Day

LG NeON® R now performs better on a sunny days thanks to its improved temperature coefficient.



#### High Power Output

The LG NeON® R has been designed to significantly enhance its output making it efficient even in limited space.



#### Outstanding Durability

With its newly reinforced frame design, LG NeON® R can endure a front load up to 6,000Pa, and a rear load up to 5,400Pa.



### 25 Years Product Warranty

As well as the enhanced performance warranty, LG has extended the product warranty of the LG NeON® R from 15 years to 25 years.

#### **About LG Electronics**

LG Electronics is a global big player, committed to expanding its operations with the solar market. The company first embarked on a solar energy source research program in 1985, supported by LG Group's vast experience in the semi-conductor, LCD, chemistry and materials industries. In 2010, LG Solar successfully released its first MonoX® series to the market, which is now available in 32 countries. The LG NeON® (previous. MonoX® NeON), NeON®2, NeON®2 BiFacial won the "Intersolar AWARD" in 2013, 2015 and 2016, which demonstrates LG Solar's lead, innovation and commitment to the industry.



#### **Mechanical Properties**

Cells	6 x 10		
Cell Vendor	LG		
Cell Type	Monocrystalline / N-type		
Cell Dimensions	161.7 x 161.7 mm		
# of Busbar	30 (Multi Ribbon Busbar)		
Dimensions (L x W x H)	1,700 x 1,016 x 40 mm		
Front Load	6,000Pa		
Rear Load	5,400Pa		
Weight	18.5 kg		
Connector Type	MC4, 05-8		
Junction Box	IP68 with 3 Bypass Diodes		
Cables	1,000 mm x 2 ea		
Glass	High Transmission Tempered Glass		
Frame	Anodized Aluminium		

#### Certifications and Warranty

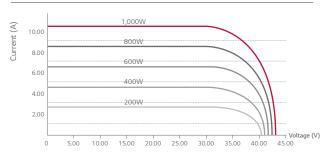
Cer tirications and warranty			
Certifications	IEC 61215, IEC 61730-1/-2		
	IEC TS 62804-1 (PID)		
	IEC 61701 (Salt mist corrosion test)		
	IEC 62716 (Ammonia corrosion test)		
	ISO 9001		
Module Fire Performance	Class C, Fire Class 1 (Italy)¹		
Product Warranty	25 Years		
Output Warranty of Pmax	25 years linear warranty <sup>2</sup>		

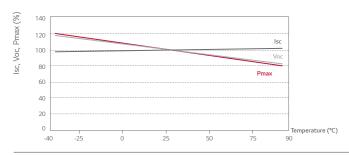
<sup>&</sup>lt;sup>1</sup> In progress

#### **Temperature Characteristics**

NOCT	[°C]	44 ± 3	
Pmax	[%/°C]	-0.30	
Voc	[%/°C]	-0.24	
lsc	[%/°C]	0.04	

#### Characteristic Curves





#### Electrical Properties (STC3)

Model		LGXXXQ1C-A5			
Maximum Power (Pmax)	[W]	370	365	360	
MPP Voltage (Vmpp)	[V]	37.0	36.7	36.5	
MPP Current (Impp)	[A]	10.01	9.95	9.87	
Open Circuit Voltage (Voc)	[V]	42.8	42.8	42.7	
Short Circuit Current (Isc)	[A]	10.82	10.8	10.79	
Module Efficiency	[%]	21.4	21.1	20.8	
Operating Temperature	[°C]	-40 ~ +90			
Maximum System Voltage	[V]	1,000			
Maximum Series Fuse Rating	[A]	20			
Power Tolerance	[%]	0~+3			

 $<sup>^3</sup>$  1) STC (Standard Test Condition): Irradiance 1,000 W/m², module temperature 25 °C, AM 1.5.

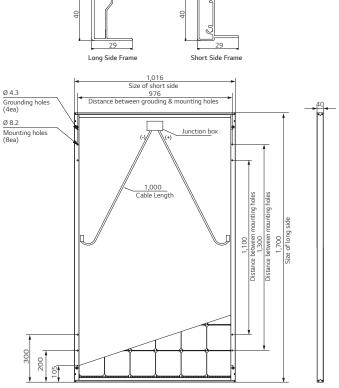
- 2) The typical change in module effi ciency at 200 W/m² in relation to 1,000 W/m² is -4.5 % .
- 3) Application Class: A, Safety Class: II.
- 4) The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion.

#### Electrical Properties (NOCT4)

Model		LGXXXQ1C-A5			
Maximum Power (Pmax)	[W]	279	275	271	
MPP Voltage (Vmpp)	[V]	36.9	36.6	36.4	
MPP Current (Impp)	[A]	7.55	7.51	7.45	
Open Circuit Voltage (Voc)	[V]	40.3	40.2	40.2	
Short Circuit Current (Isc)	[A]	8.71	8.7	8.69	

 $<sup>^4</sup>$  NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m², ambient temperature 20 °C, wind speed 1 m/s

#### Dimensions (mm)



The distance between the center of the mounting/grounding holes.



LG Electronics Deutschland GmbH EU Solar Business Group Alfred-Herrhausen-Allee 3–5 65760 Eschborn, Germany E-Mail: solar@lge.de www.lg-solar.com/uk All details in this data sheet comply with DIN EN 50380. Subject to errors and alterations. Date: 04/2018
Document: DS-Q1C-A5-EN-201804

Copyright © 2017 LG Electronics. All rights reserved.



 $<sup>^21)</sup>$  First year: min. 98%. 2) After 2nd year: max. 0.5% annual degradation. 3) 25 years: min. 88.4%.