

# LG NeON<sup>®</sup>2

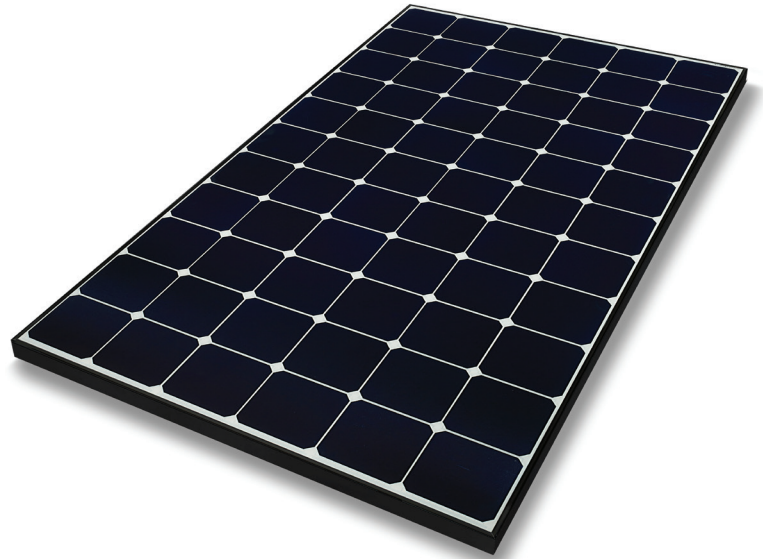
LG440QAC-A6

66

## 440W

LG NeON<sup>®</sup> R is a powerful solar module that provides world-class performance. A new cell structure that eliminates electrodes on the front maximizes the utilization of light and enhances reliability.

LG NeON<sup>®</sup> R is a result of LG's efforts to increase customer's values beyond efficiency. LG NeON<sup>®</sup> R features enhanced durability, performance under real-world conditions, an enhanced warranty and aesthetic design suitable for roofs.



## Features



### Roof Aesthetics

LG NeON<sup>®</sup> R has been designed with aesthetics in mind: the lack of any electrodes on the front creates an improved, modern aesthetic.



### 25-Year Limited Product Warranty

The NeON<sup>®</sup> R is covered by a 25-year limited product warranty. In addition, up to \$450 of labor costs will be covered in the rare case that a module needs to be repaired or replaced.



### Enhanced Performance Warranty

The LG NeON<sup>®</sup> R has an enhanced performance warranty. After 25 years, LG NeON<sup>®</sup> R is guaranteed at least 92.5% of initial performance.



### More generation per square meter

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

When you go solar, ask for the brand you can trust: LG Solar

## About LG Electronics USA, Inc.

LG Electronics is a global leader in electronic products in the clean energy markets by offering solar PV panels and energy storage systems. 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<sup>®</sup> series to the market, which is now available in 32 countries. The NeON<sup>®</sup> (previous MonoX<sup>®</sup> NeON), NeON<sup>®</sup>2, NeON<sup>®</sup>2 BiFacial won the "Intersolar AWARD" in 2013, 2015 and 2016, which demonstrates LG's leadership and innovation in the solar industry.



## LG440QAC-A6

### General Data

Cell Properties (Material/Type)	Monocrystalline / N-type
Cell Maker	LG
Cell Configuration	66 Cells (6 x 11)
Module Dimensions (L x W x H)	1,910mm x 1,042mm x 40mm
Weight	20.5 kg
Glass (Material)	Tempered Glass with AR Coating
Backsheet (Color)	White
Frame (Material)	Anodized Aluminium
Junction Box (Protection Degree)	IP 68 with 3 Bypass Diodes
Cables (Length)	1,250mm x 2EA
Connector (Type/Maker)	MC 4 / MC

### Certifications and Warranty

Certifications	IEC 61215-1/-1-1/2 : 2016, IEC 61730-1/2: 2016, UL 61730-1 : 2017, UL 61730-2 : 2017 ISO 9001, ISO 14001, ISO 50001 OHSAS 18001
Salt Mist Corrosion Test	IEC 61701:2011 Severity 6
Ammonia Corrosion Test	IEC 62716 : 2013
Hail Test	25mm (1") diameter at 23m/s (52mph)
Module Fire Performance	Type 1 (UL 61730)
Fire Rating	Class C (UL 790, ULC / ORD C 1703)
Solar Module Product Warranty	25 Years
Solar Module Output Warranty	Linear Warranty*

\*Improved: 1<sup>st</sup> year 98.5%, from 2-24th year: -0.25%/year down, 92.5% at year 25

### Temperature Characteristics

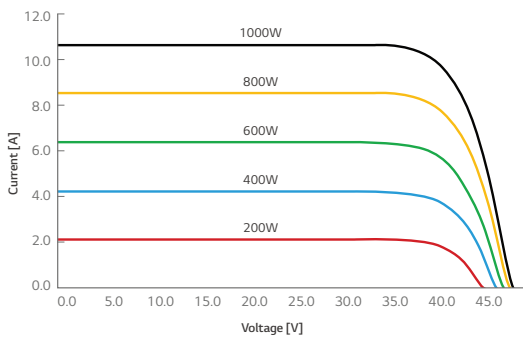
NMOT <sup>†</sup>	[°C]	44 ± 3
P <sub>max</sub>	[%/°C]	-0.29
V <sub>oc</sub>	[%/°C]	-0.24
I <sub>sc</sub>	[%/°C]	0.04

<sup>†</sup>NMOT (Nominal Module Operating Temperature): Irradiance 800 W/m<sup>2</sup>, Ambient temperature 20°C, Wind speed 1 m/s, Spectrum AM 1.5

### Electrical Properties (NMOT)

Model	LG440QAC-A6	
Maximum Power (P <sub>max</sub> )	[W]	334
MPP Voltage (V <sub>mpp</sub> )	[V]	39.1
MPP Current (I <sub>mpp</sub> )	[A]	8.53
Open Circuit Voltage (V <sub>oc</sub> )	[V]	46.0
Short Circuit Current (I <sub>sc</sub> )	[A]	9.03

### I-V Curves



### Electrical Properties (STC\*)

Model	LG440QAC-A6	
Maximum Power (P <sub>max</sub> )	[W]	440
MPP Voltage (V <sub>mpp</sub> )	[V]	41.4
MPP Current (I <sub>mpp</sub> )	[A]	10.64
Open Circuit Voltage (V <sub>oc</sub> , ±5%)	[V]	48.2
Short Circuit Current (I <sub>sc</sub> , ±5%)	[A]	11.20
Module Efficiency	[%]	22.1
Power Tolerance	[%]	0 ~ +3

\*STC (Standard Test Condition): Irradiance 1000 W/m<sup>2</sup>, Cell temperature 25°C, AM 1.5  
Measure Tolerance: ± 3%

### Operating Conditions

Operating Temperature	[°C]	-40 ~ +85
Maximum System Voltage	[V]	1,000
Maximum Series Fuse Rating	[A]	20
Mechanical Test Load* (Front/Rear) (2 rails)	[Pa]	5,400/4,000
Mechanical Test Load** (Front/Rear) (3 rails)	[Pa]	5,400/5,400

\* Based on UL 61730-1 : 2017, UL 61730-2 : 2017 Test condition (Test Load = Design Load x Safety Factor(1.5))

\*\* For details of the 3 rail test results, please check with LG staff.

### Packaging Configuration

Number of Modules per Pallet	[EA]	25
Number of Modules per 40' Container	[EA]	600
Number of Modules per 53' Container	[EA]	800
Packaging Box Dimensions (L x W x H)	[mm]	1,960 x 1,120 x 1,221
Packaging Box Dimensions (L x W x H)	[in]	77.2 x 44.1 x 48.1
Packaging Box Gross Weight	[kg]	549
Packaging Box Gross Weight	[lb]	1,210

### Dimensions (mm/inch)

