

# LG NeON<sup>®</sup>R

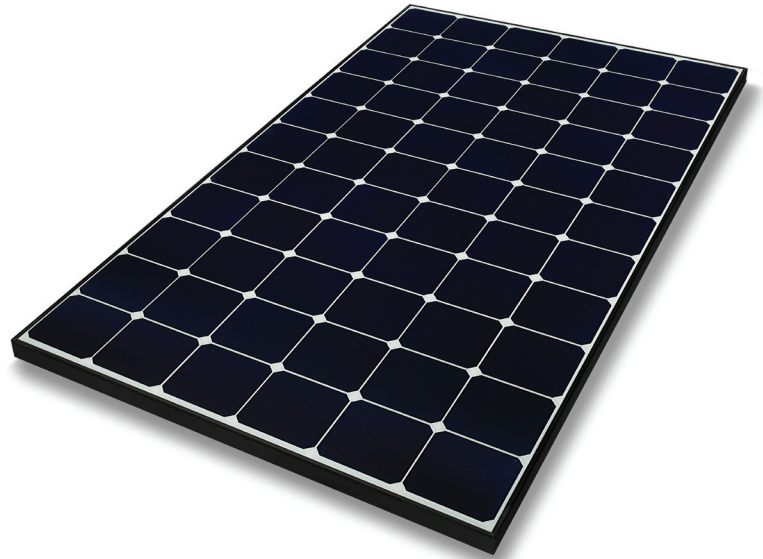
LG430QAC-A6 | LG435QAC-A6 | LG440QAC-A6

66

430W | 435W | 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.



LG430QAC-A6 | LG435QAC-A6 | 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<br>ISO 9001, ISO 14001, ISO 50001<br>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

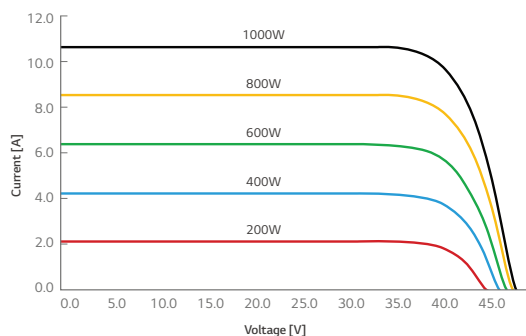
|                   |        |        |
|-------------------|--------|--------|
| NMOT <sup>*</sup> | [°C]   | 44 ± 3 |
| Pmax              | [%/°C] | -0.29  |
| Voc               | [%/°C] | -0.24  |
| Isc               | [%/°C] | 0.04   |

\*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                       |     | LG430QAC-A6 | LG435QAC-A6 | LG440QAC-A6 |
|-----------------------------|-----|-------------|-------------|-------------|
| Maximum Power (Pmax)        | [W] | 326         | 330         | 334         |
| MPP Voltage (Vmpp)          | [V] | 38.6        | 38.8        | 39.1        |
| MPP Current (Impp)          | [A] | 8.45        | 8.49        | 8.53        |
| Open Circuit Voltage (Voc)  | [V] | 45.7        | 45.8        | 46.0        |
| Short Circuit Current (Isc) | [A] | 9.02        | 9.02        | 9.03        |

### I-V Curves



### Electrical Properties (STC\*)

| Model                            |     | LG430QAC-A6 | LG435QAC-A6 | LG440QAC-A6 |
|----------------------------------|-----|-------------|-------------|-------------|
| Maximum Power (Pmax)             | [W] | 430         | 435         | 440         |
| MPP Voltage (Vmpp)               | [V] | 40.8        | 41.1        | 41.4        |
| MPP Current (Impp)               | [A] | 10.54       | 10.59       | 10.64       |
| Open Circuit Voltage (Voc, ±5%)  | [V] | 47.9        | 48.0        | 48.2        |
| Short Circuit Current (Isc, ±5%) | [A] | 11.19       | 11.20       | 11.20       |
| Module Efficiency                | [%] | 21.6        | 21.9        | 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 <sup>*</sup>         | [°C]     | -40 ~ +85 |
| Maximum System Voltage                     | [V]      | 1,000     |
| Maximum Series Fuse Rating                 | [A]      | 20        |
| Mechanical Test Load <sup>**</sup> (Front) | [Pa/psf] | 5,400     |
| Mechanical Test Load <sup>**</sup> (Rear)  | [Pa/psf] | 4,000     |

\*The operating ambient temperature of these devices may exceed 40°C at full load for all wire sizes if is determined suitable in the field use application.

\*\*Based on IEC 61215-2 : 2016 (Test Load = Design Load x Safety Factor (1.5))

### 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)

