

LG NeON[®]R

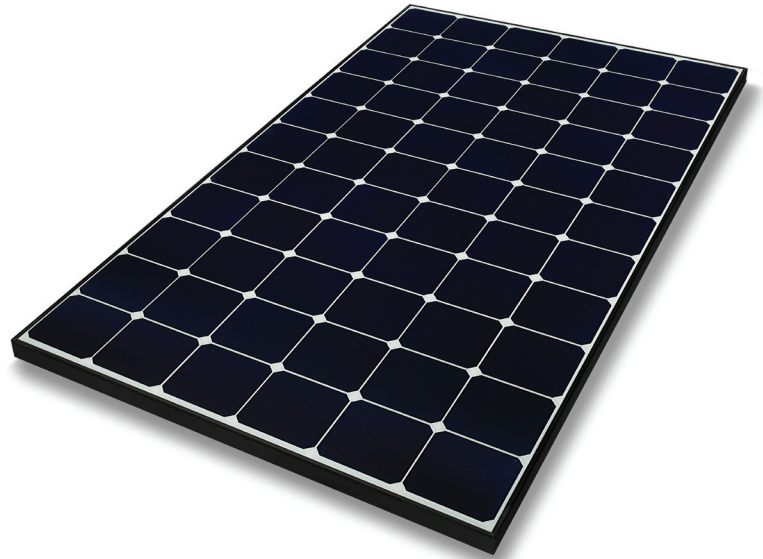
LG435QAC-A6 Preliminary

66

435W

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



Features



Roof Aesthetics

LG NeON[®]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[®]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[®]R has an enhanced performance warranty. After 25 years, LG NeON[®]R is guaranteed at least 92.5% of initial performance.



More generation per square meter

The LG NeON[®]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[®] series to the market, which is now available in 32 countries. The NeON[®] (previous MonoX[®] NeON), NeON[®]2, NeON[®]2 BiFacial won the "Intersolar AWARD" in 2013, 2015 and 2016, which demonstrates LG's leadership and innovation in the solar industry.



LG435QAC-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: 1st year 98.5%, from 2-24th year: -0.25%/year down, 92.5% at year 25
**In Progress

Temperature Characteristics

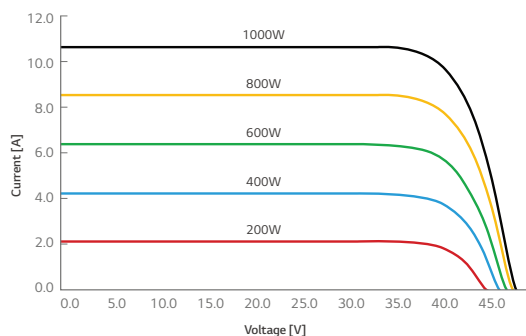
| | | |
|-------|--------|--------|
| NMOT* | [°C] | 44 ± 3 |
| Pmax | [%/°C] | -0.29 |
| Voc | [%/°C] | -0.24 |
| Isc | [%/°C] | 0.04 |

*NMOT (Nominal Module Operating Temperature): Irradiance 800 W/m², Ambient temperature 20°C, Wind speed 1 m/s, Spectrum AM 1.5

Electrical Properties (NMOT)

| | | |
|-----------------------------|-------------|------|
| Model | LG435QAC-A6 | |
| Maximum Power (Pmax) | [W] | 330 |
| MPP Voltage (Vmpp) | [V] | 38.8 |
| MPP Current (Impp) | [A] | 8.49 |
| Open Circuit Voltage (Voc) | [V] | 45.8 |
| Short Circuit Current (Isc) | [A] | 9.02 |

I-V Curves



Electrical Properties (STC*)

| | | |
|-----------------------------------|-------------|--------|
| Model | LG435QAC-A6 | |
| Maximum Power (Pmax) | [W] | 435 |
| MPP Voltage (Vmpp) | [V] | 41.1 |
| MPP Current (Impp) | [A] | 10.59 |
| Open Circuit Voltage (Voc, ± 5%) | [V] | 48.0 |
| Short Circuit Current (Isc, ± 5%) | [A] | 11.20 |
| Module Efficiency | [%] | 21.9 |
| Power Tolerance | [%] | 0 ~ +3 |

*STC (Standard Test Condition): Irradiance 1000 W/m², 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) | [Pa/psf] | 5,400 |
| Mechanical Test Load** (Rear) | [Pa/psf] | 4,000 |

*The operating ambient temperature of these devices may exceed 40°C at full load for all wire sizes if it 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] | TBD |
| 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)

