

# STELLAR PERFORMER, GREAT LOOKER

LG NeON<sup>®</sup> 2Black

UP TO 330 WATTS

TOTALLY BLACK

LG CELLO DESIGN



## LG NeON<sup>®</sup> 2 BLACK – ELEGANT DESIGN. CLEAN ENERGY.

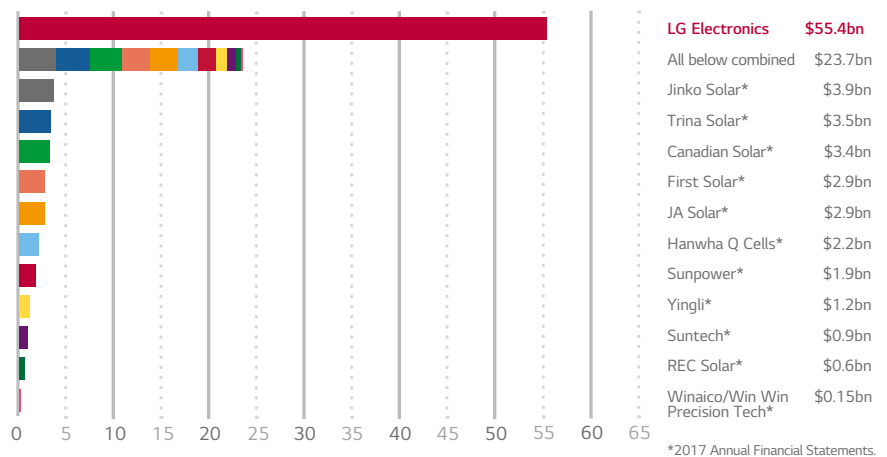
As its name suggests, the monocrystalline LG NeON<sup>®</sup> 2 Black solar module is completely black. Its discreet design means it can easily be integrated into any house roof. And the new Cello technology delivers a reliable output up to 330 Wp.

### LOCAL GUARANTOR, GLOBAL SECURITY

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

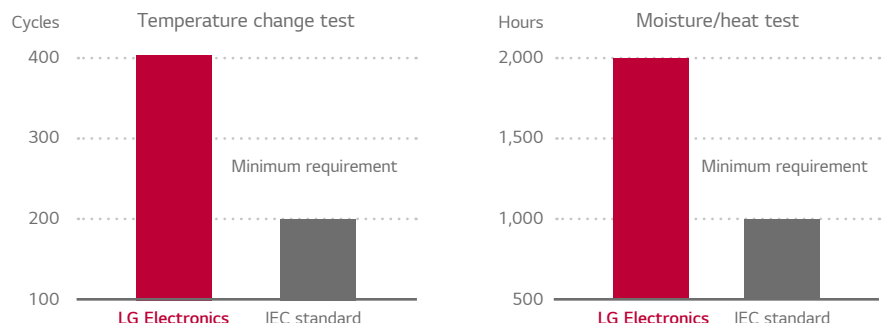
**Good to know:** LG Electronics is the warrantor for your solar modules. LG Electronics has been present in Europe with many local subsidiaries for decades.

The Warrantor's 2017 Global Sales in Billions of US Dollars



### 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.

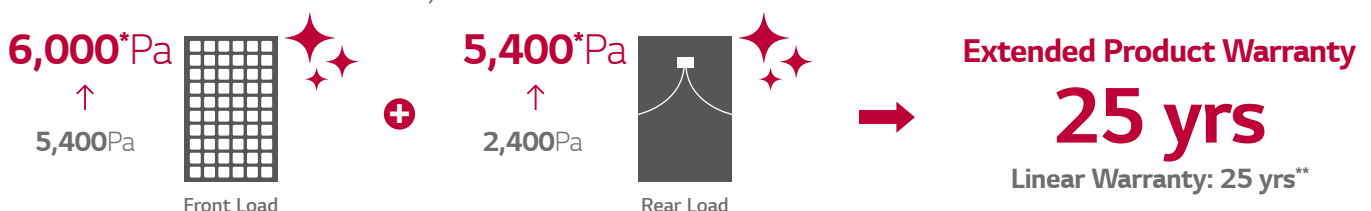


### UNDERSTATED ELEGANCE FOR BEAUTIFUL ROOFS

The LG NeON<sup>®</sup> 2 Black solar module featuring a black anodized frame and black back sheet has been designed with improved aesthetics. Thanks to the use of thinner wires, it now looks totally black even from a distance. Its elegant design will fit in easily with the appearance of your home and may increase its value.

### POWERFUL DESIGN, GUARANTEED ROBUST (LG STANDARD)\*

With reinforced frame design, LG NeON<sup>®</sup> 2 Black 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).



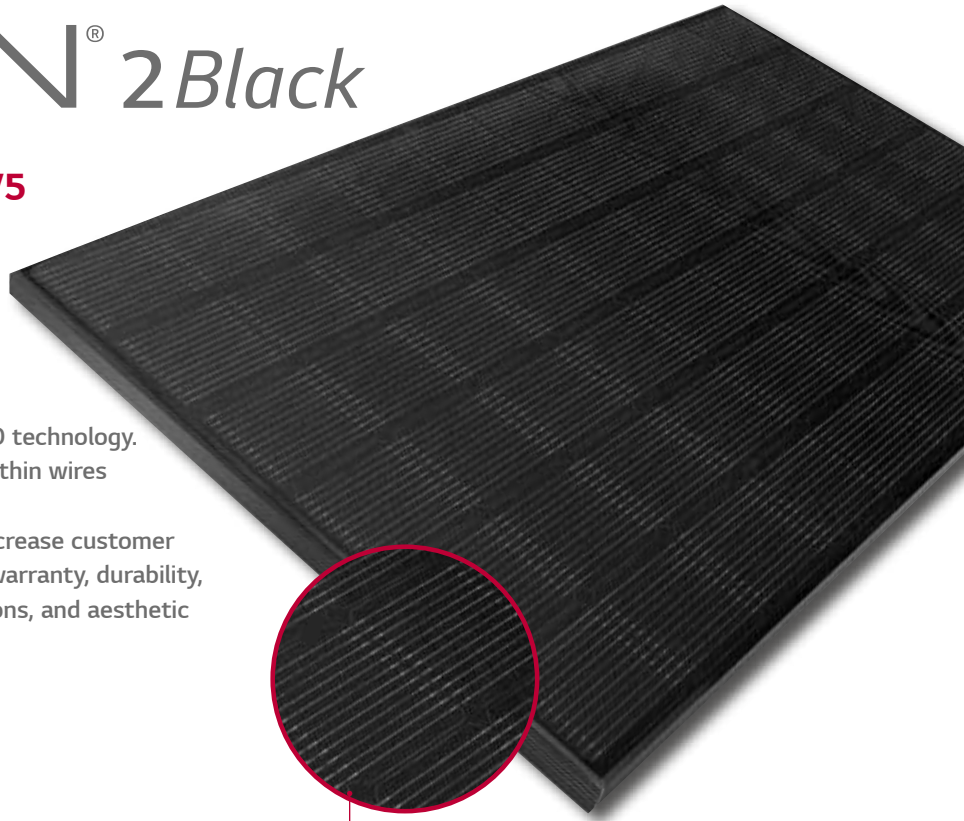
\* Module fully complies with the new IEC 61215-2: 2016 test procedures which confirmed 5,400 Pa front and 4,000 Pa rear side load. LG made internal tests to confirm 6,000 Pa front and 4,000 Pa rear side load also with new IEC 61215-2: 2016 norms. Further tests are on-going. Unless these tests turn out differently, LG confirms 6,000 Pa / 5,400 Pa.  
\*\* 1) 1st year: min. 98%. 2) After 2nd year: max. 0.35% p annual degradation. 3) Min. 89.6% for 25 years.

## LG NeON<sup>®</sup> 2 Black

**LG330N1K-V5 | LG325N1K-V5  
LG320N1K-V5**

### 60 Cells

LG's new module, NeON<sup>®</sup> 2 Black, adopts CELLO technology. CELLO technology replaces 3 busbars with 12 thin wires to enhance power output and reliability. NeON<sup>®</sup> 2 Black demonstrates LG's efforts to increase customer value beyond efficiency. It features enhanced warranty, durability, performance under real environmental conditions, and aesthetic design suitable for roofs.



CELLO technology



RM 564573 BS EN 61215 Photovoltaic Modules

### KEY FEATURES



#### Enhanced Performance Warranty

LG NeON<sup>®</sup> 2 Black has an enhanced performance warranty. The annual degradation has fallen from -0.5 %/year to -0.35 %/year.



#### Better Performance on a Sunny Day

LG NeON<sup>®</sup> 2 Black now performs better on sunny days thanks to its improved temperature coefficient.



#### Aesthetic Roof

LG NeON<sup>®</sup> 2 Black has been designed with aesthetics in mind; thinner wires that appear all black at a distance. The product can increase the value of a property with its modern design.



#### Double-Sided Cell Structure

The rear of the cell used in LG NeON<sup>®</sup> 2 Black will contribute to generation, just like the front; the light beam reflected from the rear of the module is reabsorbed to generate a great amount of additional power.

#### 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<sup>®</sup> series to the market, which is now available in 32 countries. The LG 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 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 161.75 mm                 |
| # of Busbar                         | 12 (Multi Wire Busbar)            |
| Dimensions (L x W x H)              | 1,686 x 1,016 x 40 mm             |
| Weight                              | 17.1 kg                           |
| Mechanical Test Load <sup>*</sup> : | 6,000Pa (Front)<br>5,400Pa (Rear) |
| Junction Box                        | IP68 with 3 Bypass Diodes         |
| Length of Cables                    | 2 x 1,000 mm                      |
| Front cover                         | Tempered Glass with AR Coating    |
| Frame                               | Anodized Aluminum                 |

\* Manufacturer Declaration according to IEC 61215 : 2005 (Preliminary)

≠ Mechanical Test Loads 5400 Pa / 4000 Pa based on IEC61215-2 : 2016  
(Test Load = Design Load x Safety Factor (1.5))

## Certifications and Warranty

|                                                         |                                                                                  |
|---------------------------------------------------------|----------------------------------------------------------------------------------|
| Certifications                                          | IEC 61215-1/-1-1/2:2016,<br>IEC 61730-1/2:2016<br>ISO 9001, ISO 14001, ISO 50001 |
| Salt Mist Corrosion Test                                | IEC 62701 : 2012 Severity 6                                                      |
| Ammonia Corrosion Test                                  | IEC 62716 : 2013                                                                 |
| Module Fire Performance                                 | Class C, Fire class 2                                                            |
| Product Warranty                                        | 25 years                                                                         |
| Output Warranty of Pmax<br>(Measurement Tolerance ± 3%) | 25 years linear warranty <sup>1</sup>                                            |

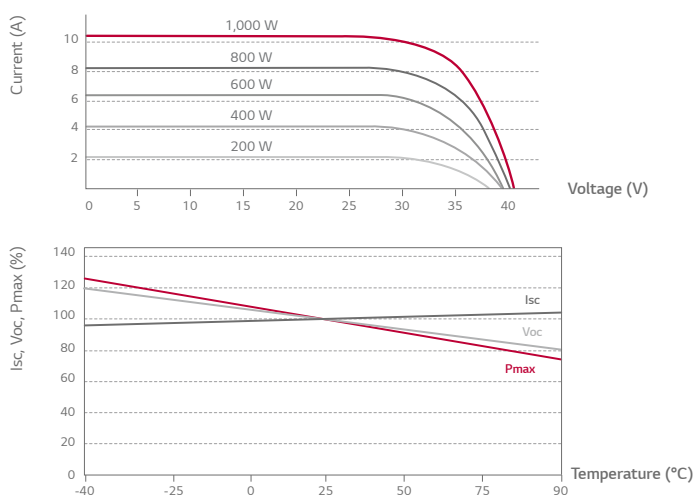
<sup>1</sup> 1) 1st year: min. 98% 2) After 2nd year: max. 0.35% p annual degradation.

3) Min. 89.6% for 25 years.

## Temperature Coefficients

|      |            |
|------|------------|
| NOCT | 42 ± 3 °C  |
| Pmpp | -0.36 %/°C |
| Voc  | -0.27 %/°C |
| Isc  | 0.03 %/°C  |

## Characteristic Curves



## Electrical Properties (STC<sup>2</sup>)

| Model                      |      | LG330N1K-V5 | LG325N1K-V5 | LG320N1K-V5 |
|----------------------------|------|-------------|-------------|-------------|
| Maximum Power Pmax         | [W]  | 330         | 325         | 320         |
| MPP Voltage Vmpp           | [V]  | 34.1        | 33.7        | 33.3        |
| MPP Current Impp           | [A]  | 9.69        | 9.65        | 9.62        |
| Open Circuit Voltage Voc   | [V]  | 41.0        | 40.9        | 40.8        |
| Short Circuit Current Isc  | [A]  | 10.27       | 10.23       | 10.19       |
| Module Efficiency          | [%]  | 19.3        | 19.0        | 18.7        |
| Operating Temperature      | [°C] | -40 ~ +90   |             |             |
| Maximum System Voltage     | [V]  | 1,000       |             |             |
| Maximum Series Fuse Rating | [A]  | 20          |             |             |
| Power Tolerance            | [%]  | 0 ~ +3      |             |             |

<sup>2</sup> 1) STC (Standard Test Condition): Irradiance 1,000 W/m<sup>2</sup>, Module Temperature 25 °C, AM 1.5.

## Electrical Properties (NMOT)

| Model                     |     | LG330N1K-V5 | LG325N1K-V5 | LG320N1K-V5 |
|---------------------------|-----|-------------|-------------|-------------|
| Maximum Power Pmax        | [W] | 247         | 243         | 239         |
| MPP Voltage Vmpp          | [V] | 31.9        | 31.5        | 31.2        |
| MPP Current Impp          | [A] | 7.73        | 7.69        | 7.67        |
| Open Circuit Voltage Voc  | [V] | 38.5        | 38.4        | 38.3        |
| Short Circuit Current Isc | [A] | 8.26        | 8.23        | 8.19        |

## Dimensions (mm)

