



## LG NeON™ 2 Black

LG320N1K-A5

LG315N1K-A5

60 cell

LG's new module, LG NeON™ 2, adopts Cello technology. Cello technology replaces 3 busbars with 12 thin wires to enhance power output and reliability. LG NeON™ 2 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.



### Enhanced Performance Warranty

LG NeON™ 2 Black has an enhanced performance warranty. The annual degradation has fallen from -0.6%/yr to -0.55%/yr. Even after 25 years, the cell guarantees 1.2%p more output than the previous LG NeON™ 2 Black modules.



### High Power Output

Compared with previous models, the LG NeON™ 2 Black has been designed to significantly enhance its output efficiency, thereby making it efficient even in limited space.



### Aesthetic Roof

LG NeON™ 2 Black has been designed with aesthetics in mind; thinner wires that appear all black at a distance. The product may help increase the value of a property with its modern design.



### Outstanding Durability

With its newly reinforced frame design, LG has extended the warranty of the LG NeON™ 2 Black for an additional 2 years. Additionally, LG NeON™ 2 Black can endure a front load up to 6000 Pa, and a rear load up to 5400 Pa.



### Better Performance on a Sunny Day

LG NeON™ 2 Black now performs better on sunny days thanks to its improved temperature coefficient.



### Double-Sided Cell Structure

The rear of the cell used in LG NeON™ 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 player who has been committed to expanding its capacity, based on solar energy business as its future growth engine. We embarked on a solar energy source research program in 1985, supported by LG Group's rich experience in semi-conductor, LCD, chemistry, and materials industry. We successfully released the first Mono X® series to the market in 2010, which were exported to 32 countries in the following 2 years, thereafter. In 2013, LG NeON™ (previously known as Mono X® NeON) won "Intersolar Award", which proved LG is the leader of innovation in the industry.

## Mechanical Properties

Cells	6 x 10
Cell Vendor	LG
Cell Type	Monocrystalline / N-type
Cell Dimensions	161.7 x 161.7 mm / 6 inches
# of Busbar	12 (Multi Wire Busbar)
Dimensions (L x W x H)	1686 x 1016 x 40 mm 66.38 x 40 x 1.57 inch
Front Load	6000Pa
Rear Load	5400Pa
Weight	18 kg
Connector Type	MC4
Junction Box	IP68 with 3 Bypass Diodes
Cables	1000 mm x 2 ea
Glass	High Transmission Tempered Glass
Frame	Anodized Aluminium

## Certifications and Warranty

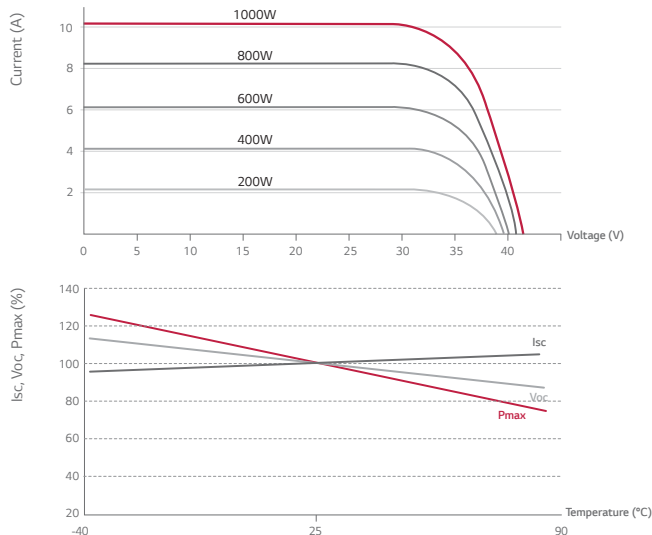
Certifications	IEC 61215, IEC 61730-1/-2 UL 1703 IEC 61701 (Salt mist corrosion test) IEC 62716 (Ammonia corrosion test) ISO 9001
Module Fire Performance (USA)	Type 2
Fire Rating (CANADA)	Class C
Product Warranty	12 years
Output Warranty of Pmax	Linear warranty**

\*\* 1) 1st year : 98%, 2) After 2nd year : 0.55% annual degradation, 3) 25 years : 84.8%

## Temperature Characteristics

NOCT	45 ± 3 °C
Pmpp	-0.37%/°C
Voc	-0.27%/°C
Isc	0.03 %/°C

## Characteristic Curves



## Electrical Properties (STC \*)

Module	LG320N1K-A5	LG315N1K-A5
Maximum Power (Pmax)	320	315
MPP Voltage (Vmpp)	33.3	32.9
MPP Current (Impp)	9.62	9.58
Open Circuit Voltage (Voc)	40.8	40.7
Short Circuit Current (Isc)	10.19	10.15
Module Efficiency	18.7	18.4
Operating Temperature	-40 ~ +90	
Maximum System Voltage	1,000	
Maximum Series Fuse Rating	20	
Power Tolerance (%)	0 ~ +3	

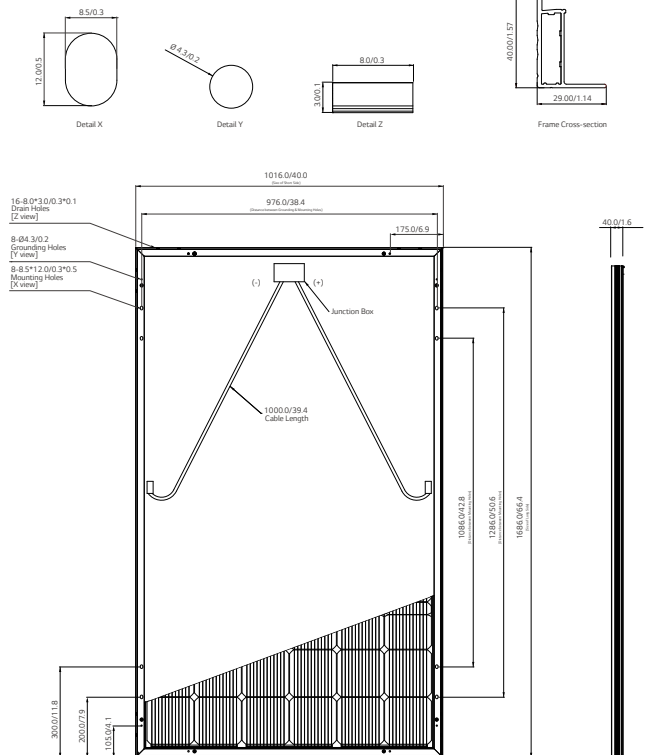
\* STC (Standard Test Condition): Irradiance 1,000 W/m<sup>2</sup>, Ambient Temperature 25 °C, AM 1.5  
\* The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion.  
\* The typical change in module efficiency at 200 W/m<sup>2</sup> in relation to 1000 W/m<sup>2</sup> is -2.0%.

## Electrical Properties (NOCT\*)

Module	LG320N1K-A5	LG315N1K-A5
Maximum Power (Pmax)	236	232
MPP Voltage (Vmpp)	30.8	3.04
MPP Current (Impp)	7.67	7.63
Open Circuit Voltage (Voc)	38.0	37.9
Short Circuit Current (Isc)	8.20	8.17

\* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, ambient temperature 20 °C, wind speed 1m/s

## Dimensions (mm/in)



North America Solar Business Team  
LG Electronics U.S.A. Inc  
1000 Sylvan Ave, Englewood Cliffs, NJ 07632  
Contact: lg.solar@lge.com  
www.lgsolarusa.com

Product specifications are subject to change without notice.

Copyright © 2017 LG Electronics. All rights reserved.  
01/01/2017

Innovation for a Better Life

