



**LG NeON<sup>®</sup> 2 Black** LG320N1K-A5

60 cell

LG's new module, LG NeON<sup>®</sup> 2, adopts Cello technology. Cello technology replaces 3 busbars with 12 thin wires to enhance power output and reliability. LG NeON<sup>®</sup> 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<sup>®</sup> 2 Black has an enhanced performance warranty. The annual degradation has fallen from -0.6%/yr to -0.5%/yr. Even after 25 years, the cell guarantees 1.2% more output than the previous LG NeON<sup>®</sup> 2 Black modules.



**High Power Output**

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



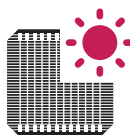
**Aesthetic Roof**

LG NeON<sup>®</sup> 2 Black has been designed with aesthetics in mind; thinner wires that appear all black at a distance. The product 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<sup>®</sup> 2 Black for an additional 2 years. Additionally, LG NeON<sup>®</sup> 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<sup>®</sup> 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<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 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<sup>®</sup> series to the market in 2010, which were exported to 32 countries in the following 2 years, thereafter. In 2013, LG NeON<sup>®</sup> (previously known as Mono X<sup>®</sup> 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

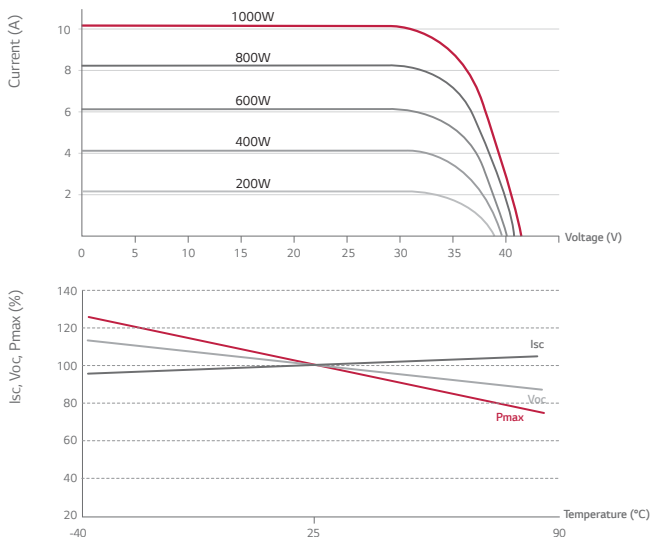
Certifications	IEC 61215, IEC 61730-1/-2 UL 1703 IEC 61701 (Salt mist corrosion test) IEC 62716 (Ammonia corrosion test) ISO 9001
Module Fire Performance (USA)	Type 2
Fire Rating (CANADA)	Class C
Product Warranty	15 years
Output Warranty of Pmax	Linear warranty**

\*\* 1) 1st year : 98%, 2) After 1st year : 0.5% annual degradation, 3) 25 years : 86%

### 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
Maximum Power (Pmax)	320
MPP Voltage (Vmpp)	33.3
MPP Current (Impp)	9.62
Open Circuit Voltage (Voc)	40.8
Short Circuit Current (Isc)	10.19
Module Efficiency	18.7
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.

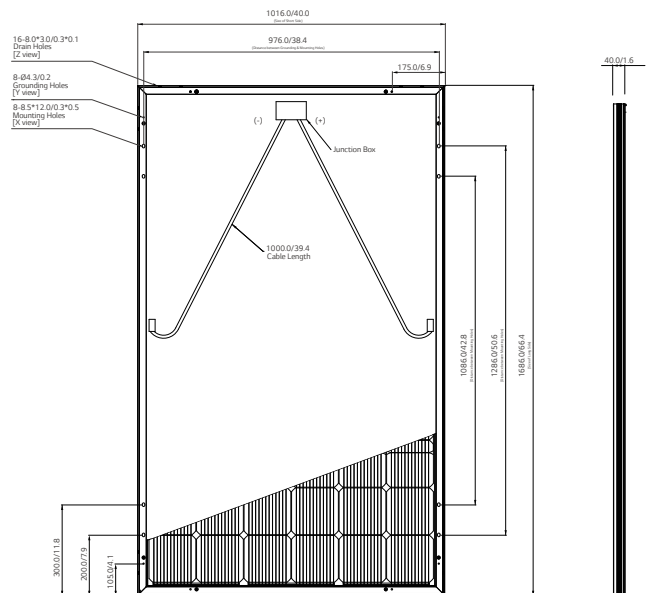
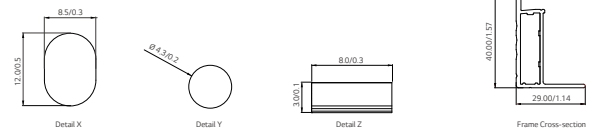
\* The typical change in module efficiency at 200 W/m<sup>2</sup> in relation to 1000 W/m<sup>2</sup> is -2.0%.

### Electrical Properties (NOCT\*)

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

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

### Dimensions (mm/in)



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Innovation for a Better Life

