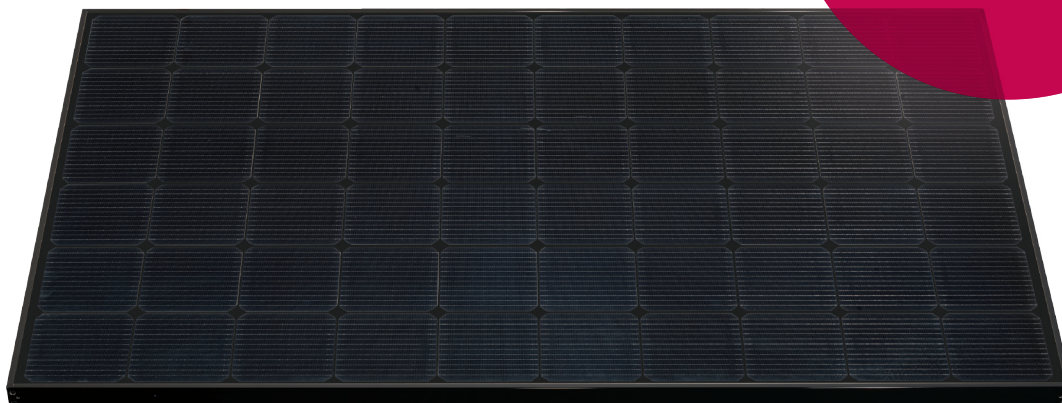




LG NeON[®] 2 Black

LG320N1K-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 -0.5%/yr. Even after 25 years, the cell guarantees 2.4% more output than the previous LG NeON[®] 2 modules.



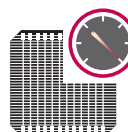
High Power Output

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.



Roof Aesthetics

LG NeON[®] 2 Black has been designed with aesthetics in mind, using thinner wires that appear all black at a distance.



Outstanding Durability

With its newly reinforced frame design, LG has extended the warranty of the LG NeON[®] 2 Black for an additional 3 years. Additionally, LG NeON[®] 2 Black can endure a front load up to 6000 Pa, and a rear load up to 5400 Pa.



Improved Performance on Sunny Days

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 the LG NeON[®] 2 Black contributes to generation, just like the front; the light beam reflected from the rear of the module is reabsorbed to generate additional power.

About LG Electronics

LG Electronics is a global player who has been committed to expanding its operations with the solar market. The company first embarked on a solar energy source research programs 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 Mono X[®] series to the market, which is now available in 32 countries. The LG NeON[®] (previously known as Mono X[®] NeON) and the LG NeON[®] 2 won the "Intersolar Award" in 2013 and 2015, which demonstrates LG Solar's lead, innovations and commitment to the industry.

Mechanical Properties

Cells	6 x 10
Cell Vendor	LG
Cell Type	Monocrystalline / N-type
Cell Dimensions	161.7 x 161.7 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	6000 Pa
Rear Load	5400 Pa
Weight	18 kg
Connector Type	MC4
Junction Box	IP68 with 3 Bypass Diodes
Length of Cables	1000 mm x 2 ea
Glass	Tempered Glass with AR Coating
Frame	Anodized Aluminum

Certifications and Warranty

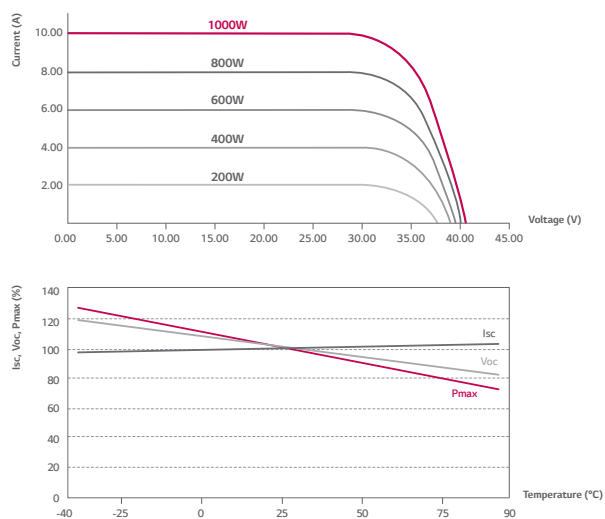
Certifications	IEC 61215, IEC 61730-1/-2 UL 1703 IEC 61701 (Salt mist corrosion test) IEC 62716 (Ammonia corrosion test) ISO 9001
Module Fire Performance (USA)	Type 2
Fire Rating (for CANADA)	Class C
Product Warranty	15 years
Output Warranty of P _{max}	Linear warranty**

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

Temperature Characteristics

NOCT	45 ± 3 °C
P _{mpp}	-0.37 %/°C
V _{oc}	-0.27 %/°C
I _{sc}	0.03 %/°C

Characteristic Curves



Electrical Properties (STC *)

Module	LG320N1K-A5
Maximum Power (P _{max})	320
MPP Voltage (V _{mpp})	33.3
MPP Current (I _{mpp})	9.62
Open Circuit Voltage (V _{oc})	40.8
Short Circuit Current (I _{sc})	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/m², 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/m² in relation to 1000 W/m² is -2.0%.

Electrical Properties (NOCT*)

Module	LG320N1K-A5
Maximum Power (P _{max})	236
MPP Voltage (V _{mpp})	30.8
MPP Current (I _{mpp})	7.67
Open Circuit Voltage (V _{oc})	38.0
Short Circuit Current (I _{sc})	8.20

* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², ambient temperature 20 °C, wind speed 1m/s

Dimensions (mm/in)

