

LG NeON[®] 2 Black

LG305N1K-G4

60 cell

LG's new module, LG NeON[®] 2 Black, adopts Cello technology. Cello technology replaces 3 busbars with 12 thin wires to enhance power output and reliability. LG NeON[®] 2 Black 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 -0.7%/yr to -0.6%/yr. Even after 25 years, the cell guarantees 2.4%p more output than the previous LG NeON[®] modules.



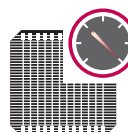
High Power Output

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 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 first Mono X[®] series to the market in 2010, which were exported to 32 countries in the following 2 years, thereafter. In 2013, NeON[®] (previously known as Mono X[®] NeON) & 2015 NeON2 with CELLO technology 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	156.75 x 156.75 mm / 6 inches
# of Busbar	12 (Multi Wire Busbar) 
Dimensions (L x W x H)	1640 x 1000 x 40 mm 64.57 x 39.37 x 1.57 inch
Front Load	6000 Pa / 125 psf 
Rear Load	5400 Pa / 113 psf 
Weight	17.0 ± 0.5 kg / 37.48 ± 1.1 lbs
Connector Type	MC4, MC4 Compatible, IP67
Junction Box	IP67 with 3 Bypass Diodes
Length of Cables	2 x 1000 mm / 2 x 39.37 inch
Glass	High Transmission Tempered Glass
Frame	Anodized Aluminum

Certifications and Warranty

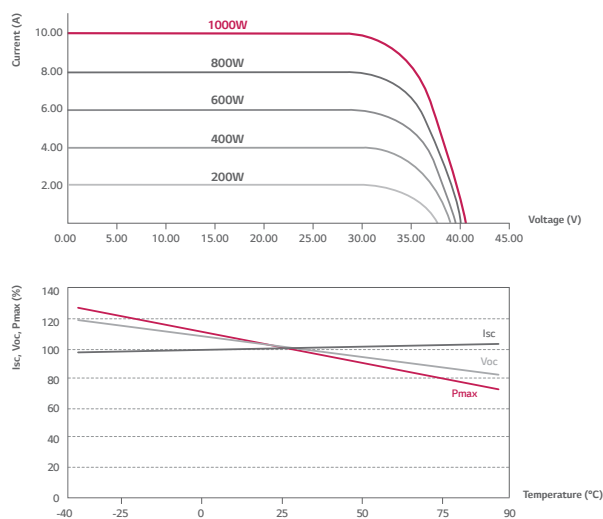
Certifications	IEC 61215, IEC 61730-1/-2 IEC 62716 (Ammonia Test) IEC 61701 (Salt Mist Corrosion Test) ISO 9001 UL 1703
Module Fire Performance (USA)	Type 2 (UL 1703)
Fire Rating (for CANADA)	Class C (ULC/ORD C1703)
Product Warranty	12 years 
Output Warranty of Pmax	Linear warranty* 

* 1) 1st year: 98%, 2) After 2nd year: 0.6%p annual degradation, 3) 83.6% for 25 years

Temperature Characteristics

NOCT	45 ± 3 °C
Pmpp	-0.38 %/°C 
Voc	-0.28 %/°C
Isc	0.03 %/°C

Characteristic Curves



Electrical Properties (STC *)

Module Type	305 W
MPP Voltage (Vmpp)	32.9
MPP Current (Impp)	9.28
Open Circuit Voltage (Voc)	40.1
Short Circuit Current (Isc)	9.74
Module Efficiency (%)	18.6
Operating Temperature (°C)	-40 ~ +90
Maximum System Voltage (V)	1000 (IEC/UL)
Maximum Series Fuse Rating (A)	20
Power Tolerance (%)	0 ~ +3

* STC (Standard Test Condition): Irradiance 1000 W/m², Module Temperature 25 °C, AM 1.5

* The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion.

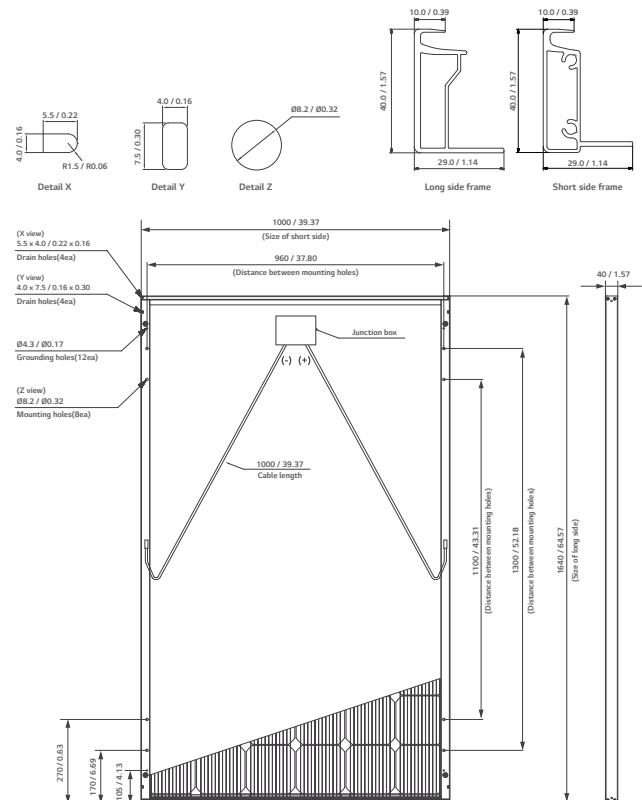
* The typical change in module efficiency at 200 W/m² in relation to 1000 W/m² is -3.0%.

Electrical Properties (NOCT*)

Module Type	305 W
Maximum Power (Pmax)	225
MPP Voltage (Vmpp)	30.4
MPP Current (Impp)	7.39
Open Circuit Voltage (Voc)	37.3
Short Circuit Current (Isc)	7.84

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

Dimensions (mm/in)



* The distance between the center of the mounting/grounding holes.

