

# 60 Cell

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

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.











# **Key Features**



## **Enhanced Performance Warranty**

LG NeON™ 2 Black has an enhanced performance warranty. The annual degradation has fallen from -0.7%/year to -0.6%/year. Even after 25 years, the cell guarantees 2.4% more output than the previous NeON™ modules.



#### Aesthetic Roof

LG NeON™ 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.



#### Better Performance on a Sunny Day

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



## High Power Output

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



## **Outstanding Durability**

With its newly reinforced frame design, LG has extended the warranty of the 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.



### 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**





#### **Mechanical Properties**

Cells	6 x 10
Cell Vendor	LG
Cell Type	Monocrystalline / N-type
Cell Dimensions	156.75 x 156.75 mm
# of Busbar	12 (Multi Wire Busbar)
Dimensions (L x W x H)	1640 x 1000 x 40 mm
Static snow Load	6000 Pa
Static wind Load	5400 Pa
Weight	17.0 ± 0.5 kg
Connector Type	MC4
Junction Box	IP67 with 3 Bypass Diodes
Length of Cables	2 x 1000 mm
Front cover	High Transmission Tempered Glass
Frame	Anodized Aluminum

#### **Certifications and Warranty**

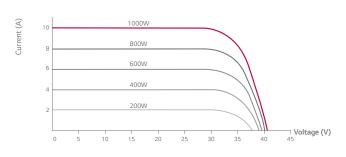
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Certifications (In Progress)	IEC 61215, IEC 61730-1/-2
	ISO 9001, IEC 62716 (Ammonia Test)
	IEC 61701(Salt Mist Corrosion Test)
Module Fire Performance	Class C
Product Warranty	12 Years
Output Warranty of Pmax (Measurement Tolerance ± 3%)	Linear Warranty <sup>1</sup>

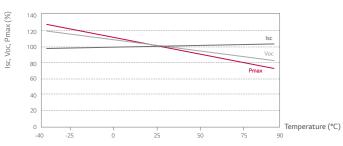
 $<sup>^{\</sup>rm 1}$  1) 1st year. 98%, 2) After 2nd year. 0.6%p annual degradation, 3) 83.6% for 25 years

# **Temperature Coefficients**

NOCT	46 ± 3 ℃
Pmpp	-0.38 %/°C
Voc	-0.28 %/°C
Isc	0.02 %/°C

#### Characteristic Curves





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

	300 W
MPP Voltage Vmpp (V)	32.5
MPP Current Impp (A)	9.26
Open Circuit Voltage Voc (V)	39.7
Short Circuit Current Isc (A)	9.70
Module Efficiency (%)	18.3
Operating Temperature (°C)	-40 ~ +90
Maximum System Voltage (V)	1000
Maximum Series Fuse Rating (A)	20
Power Tolerance (%)	0~+3

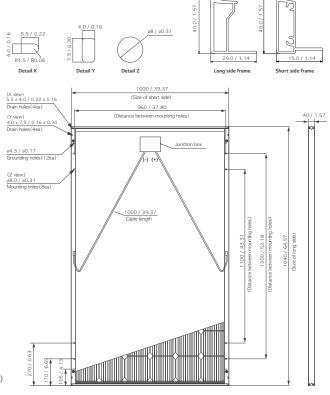
- \* STC (Standard Test Condition): Irradiance 1000 W/m², Module Temperature 25 °C, AM 1.5
- \* The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion \* The typical change in module efficiency at 200 W/m² in relation to 1000 W/m² is -3.0%.

# Electrical Properties (NOCT3)

	300 W
Maximum Power Pmax (W)	218
MPP Voltage Vmpp (V)	29.5
MPP Current Impp (A)	7.38
Open Circuit Voltage Voc (V)	36.5
Short Circuit Current Isc (A)	7.83

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

#### Dimensions (mm)



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



All details in this data sheet comply with DIN EN 50380. Subject to errors and alterations. Date: 05/2015 Document: DS-N1K-G4-EN-201505



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