# LG N<sub>e</sub>ON<sup>™</sup> 2 Black

# LG300N1K-G4

EN

# 60 cell

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

NeON<sup>™</sup> 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<sup>™</sup> 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 NeON<sup>™</sup> modules.



#### Aesthetic Roof

LG NeON<sup>TM</sup> 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<sup>™</sup> 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<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.



### 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.



LG Electronics is a global big player, committed to expanding its operations with the solar market. The company first embarked on a solar energy source research program 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 MonoX<sup>®</sup> series to the market, which is now available in 32 countries. The NeON<sup>™</sup> (previous. MonoX<sup>®</sup> NeON) and The NeON<sup>™</sup>2 won the "Intersolar AWARD" in 2013 and 2015, which demonstrates LG Solar's lead, innovation and commitment to the industry.



# $LG N_{e}ON^{M} 2Black$

#### **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
Front Load	6000 Pa 🌞
Rear Load	5400 Pa 🌞
Weight	17.0 ± 0.5 kg
Connector Type	MC4, MC4 Compatible, IP67
Junction Box	IP67 with 3 Bypass Diodes
Length of Cables	2 x 1000 mm
Glass	High Transmission Tempered Glass
Frame	Anodized Aluminum

#### Certifications and Warranty

	IEC 61215, IEC 61730-1/-2
	IEC 62716 (Ammonia Test)
Certifications	IEC 61701(Salt Mist Corrosion Test)
	UL 1703
	ISO 9001
Module Fire Performance	Type 2 (UL 1703)
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

#### Electrical Properties (STC\*)

Module Type	300 W
MPP Voltage (Vmpp)	32.5
MPP Current (Impp)	9.26
Open Circuit Voltage (Voc)	39.7
Short Circuit Current (lsc)	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/m<sup>2</sup> in relation to 1000 W/m<sup>2</sup> is -3.0%.

#### Electrical Properties (NOCT\*)

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

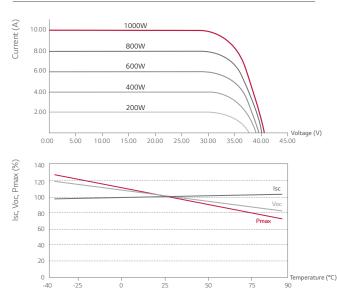
\* NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, wind speed 1 m/s

#### Dimensions (mm)



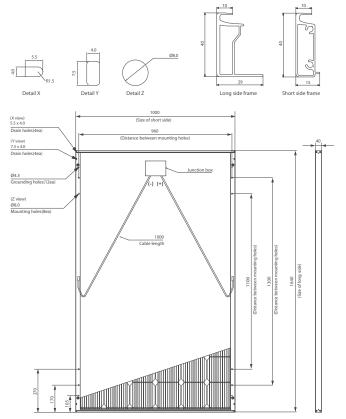
NOCT	46 ± 3 °C
Pmax	-0.38 %/°C 🌞
Voc	-0.28 %/°C
lsc	0.03 %/°C

#### **Characteristic Curves**





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

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