

# Innovation for a Better Life





LG305N1C-G4

# 60 cell

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









(M 564573 BS EN 612 Photovoltaic Modules



#### **Enhanced Performance Warranty**

LG NeON™ 2 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 has been designed to significantly enhance its output efficiency, thereby making it efficient even in limited space.



#### **Aesthetic Roof**

LG NeON™ 2 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 $^{\text{TM}}$  2 for an additional 2 years. Additionally, LG NeON $^{\text{TM}}$  2 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  $^{\rm IM}$  2 now performs better on sunny days thanks to its improved temperature coefficiency.



# **Double-Sided Cell Structure**

The rear of the cell used in LG  $NeON^m 2$  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 / 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**

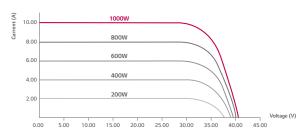
Certifications	IEC 61215, IEC 61730-1/-2
	IEC 62716 (Ammonia Test)
	IEC 61701 (Salt Mist Corrosion Test)
	ISO 9001
	UL 1703
Module Fire Performance (USA)	Type 1 (UL1703)(LGxxxN1C-G4.AUF)
Fire Rating (for CANADA)	Class C (ULC/ORD C1703)
Product Warranty	12 years 🜞
Output Warranty of Pmax	Linear warranty* 🌞

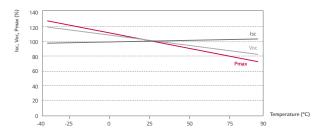
<sup>\* 1) 1</sup>st year. 98%, 2) After 2nd year. 0.6%p annual degradation, 3) 83.6% for 25 years

#### **Temperature Characteristics**

NOCT	46 ± 3 ℃
Pmpp	-0.38 %/°C 🌞
Voc	-0.28 %/°C
Isc	0.03 %/°C

### **Characteristic Curves**





# **Electrical Properties (STC \*)**

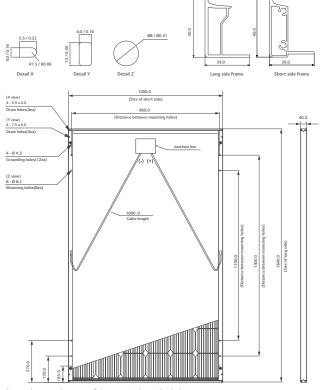
Module Type	305 W
MPP Voltage (Vmpp)	32.5
MPP Current (Impp)	9.39
Open Circuit Voltage (Voc)	40.1
Short Circuit Current (Isc)	9.93
Module Efficiency (%)	18.6
Operating Temperature (°C)	-40 ~ +90
Maximum System Voltage (V)	1000
Maximum Series Fuse Rating (A)	20
Power Tolerance (%)	0 ~ +3

# **Electrical Properties (NOCT\*)**

Module Type	305 W
Maximum Power (Pmax)	223
MPP Voltage (Vmpp)	29.7
MPP Current (Impp)	7.49
Open Circuit Voltage (Voc)	37.1
Short Circuit Current (Isc)	8.01

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

#### Dimensions (mm/in)





North America Solar Business Team LG Electronics U.S.A. Inc 1000 Sylvan Ave, Englewood Cliffs, NJ 07632

Contact: lg.solar@lge.com www.lgsolarusa.com

Product specifications are subject to change without notice. DS-N2-60-C-G-F-EN-50427

Copyright © 2015 LG Electronics. All rights reserved. 01/04/2015



<sup>\*</sup> STC (Standard Test Condition): Irradiance 1000 W/m³, 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  $200 \, \text{W/m}^2$  in relation to  $1000 \, \text{W/m}^2$  is -2.0%.