

## With LG, it's all possible.



# MonoX NeON LG300N1C-A3

## 60 cell

Introducing MonoX<sup>™</sup> NeON module series, which uses highly efficient n-type materials, an elaborate process control adopting a semiconductor processing solution and a double-sided structure. Our R&D concentrates on developing a product that is not only efficient, but strives to increase practical value for customers.





## **N-TYPE MATERIAL**

MonoX<sup>™</sup> NeON uses n-type cells, boasting higher mobility of electric charge, resulting in higher generation efficiency.



## NANO LEVEL CONTROL

MonoX<sup>™</sup> NeON uses the Nano-level process control predominant in semiconductor processing process, which ensures less electric loss from internal defects.













#### About LG Electronics

LG Electronics is a multinational corporation committed to expanding its capacity with solar energy business as its future growth engine. Our a solar energy source research program was launched in 1985, backed by LG Group's rich experience in semi-conductors, LCD, chemistry and electronic materials industry. We successfully released the first MonoX<sup>TM</sup> series to the market in 2010 which exported to 32 countries in 2 years. In 2013, MonoX<sup>TM</sup> NeON won "Intersolar Award", which proved its leading innovation in the industry.



## NEAR ZERO LID (LIGHT INDUCED DEGRADATION)

The n-type cells used in Mono<sup>™</sup> NeON have almost no boron, which may cause the initial efficiency to drop, leading to less LID.

## DOUBLE SIDED CELL STRUCTURE

The rear of the cell used in MonoX<sup>™</sup> NeON is designed to contribute to generation; the light beam reflected from the rear of the module is reabsorbed to generate a great amount of additional power.



#### **MECHANICAL PROPERTIES**

Cells	6 x 10
Cell vendor	LG
Cell type	Monocrystalline
Cell dimensions	156 x 156 mm / 6 x 6 in
# of busbar	3
Dimensions (L x W x H)	1640 x 1000 x 35 mm
	64.57 x 39.37 x 1.38 in
Static snow load	5400 Pa / 113 psf
Static wind load	2400 Pa / 50 psf
Weight	16.8 ± 0.5 kg / 36.96 ± 1.1 lb
Connector type	MC4 connector IP 67
Junction box	IP 67 with 3 bypass diodes
Length of cables	2 x 1000 mm / 2 x 39.37 in
Glass	High transmission tempered glass
Frame	Anodized aluminum

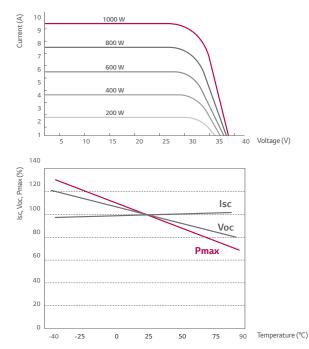
#### CERTIFICATIONS AND WARRANTY

Certifications (In Progress)	IEC 61215, IEC 61730-1/-2, UL 1703,	
	ISO 9001, IEC 61701, IEC 62716	
Product warranty	10 years	
Output warranty of Pmax (measurement Tolerance ± 3%)	Linear warranty*	
* 1) 1st year. 98%, 2) After 2nd year. 0.7%p annual degradation, 3) 81.2% for 25 years		

#### **TEMPERATURE COEFFICIENTS**

NOCT	45 ± 2 ℃
Pmpp	-0.41 %/°C
Voc	-0.29 %/°C
lsc	0.04 %/°C

#### CHARACTERISTIC CURVES



#### **ELECTRICAL PROPERTIES (STC\*)**

	300 W	
MPP voltage (Vmpp)	32.0	
MPP current (Impp)	9.40	
Open circuit voltage (Voc)	39.8	
Short circuit current (Isc)	9.98	
Module efficiency (%)	18.3	
Operating temperature (°C)	-40 ~ +90	
Maximum system voltage (V)	1000 (IEC), 600 (UL)	
Maximum series fuse rating (A)	20	
Power tolerance (%)	0 ~ +3	
* STC (Standard Test Condition): Irradiance 1000 W/m <sup>2</sup> . m	odule temperature 25 °C. AM 1.5	

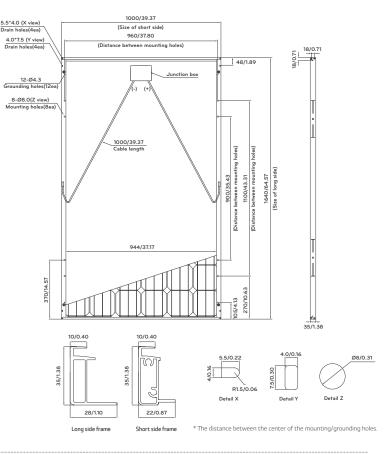
\* The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion.

#### **ELECTRICAL PROPERTIES (NOCT\*)**

	300 W
Maximum power (Pmpp)	220
MPP voltage (Vmpp)	29.3
MPP current (Impp)	7.50
Open circuit voltage (Voc)	36.9
Short circuit current (lsc)	8.05
Efficiency reduction (from 1000 W/m <sup>2</sup> to 200 W/m <sup>2</sup> )	< 3.5%

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

#### DIMENSIONS (MM/IN)





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