

With LG,
it's all possible.



MonoX™ NeON LG285N1C-A3

60 cell

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



NEAR ZERO LID (LIGHT INDUCED DEGRADATION)

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



NANO LEVEL CONTROL

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



DOUBLE SIDED CELL STRUCTURE

The rear of the cell used in MonoX™ 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.



Light Weight



Convenient Installation



EL Test



Current Sorting



Linear Warranty



Positive Power Tolerance

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™ series to the market in 2010 which exported to 32 countries in 2 years. In 2013, MonoX™ NeON won "Intersolar Award", which proved its leading innovation in the industry.

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

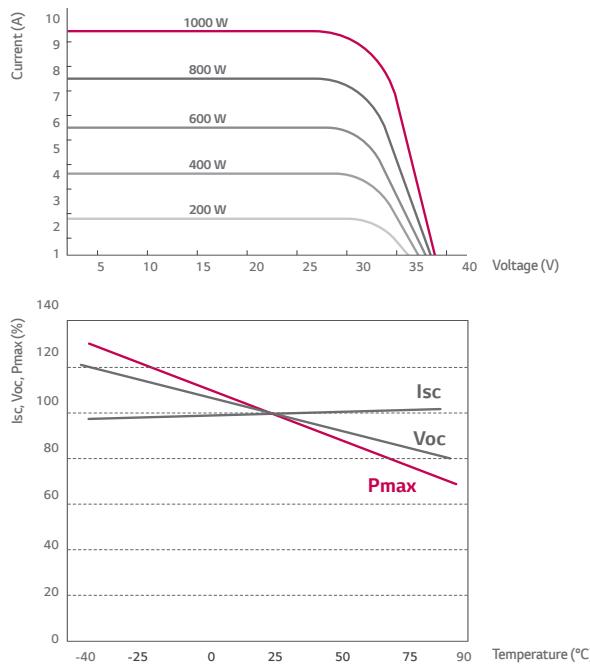
Certifications (In Progress)	IEC 61215, IEC 61730-1/-2, UL 1703, ISO 9001, IEC 61701, IEC 62716
Product warranty	10 years
Output warranty of Pmax (measurement Tolerance ± 3%)	Linear warranty* 

* 1) 1st year: 98%, 2) After 2nd year: 0.7% annual degradation, 3) 81.2% for 25 years

TEMPERATURE COEFFICIENTS

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

CHARACTERISTIC CURVES



ELECTRICAL PROPERTIES (STC*)

	285 W
MPP voltage (Vmpp)	31.6
MPP current (Impp)	9.03
Open circuit voltage (Voc)	39.5
Short circuit current (Isc)	9.59
Module efficiency (%)	17.4
Operating temperature (°C)	-40 ~ +90
Maximum system voltage (V)	1000 (IEC), 600 (UL)
Maximum series fuse rating (A)	20
Power tolerance (%)	0 ~ +3

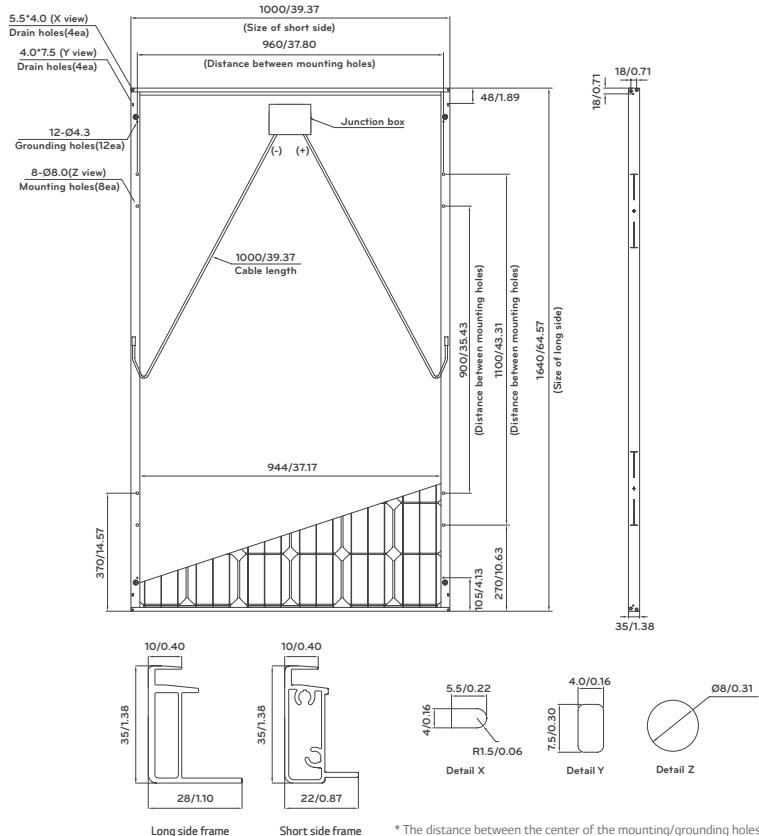
* STC (Standard Test Condition): Irradiance 1000 W/m², module temperature 25 °C, AM 1.5
* The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion.

ELECTRICAL PROPERTIES (NOCT*)

	285 W
Maximum power (Pmpp)	208
MPP voltage (Vmpp)	28.9
MPP current (Impp)	7.20
Open circuit voltage (Voc)	36.6
Short circuit current (Isc)	7.73
Efficiency reduction (from 1000 W/m ² to 200 W/m ²)	< 3.5%

* 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.

