Inspections Division
Date: 12/23/13

LG
Life's Good

EN

MonoX™ NeON

LG300N1C-A3 / LG295N1C-A3 / LG290N1C-A3 / LG285N1C-A3

inter solar award 2013 WINNER

PLUS X AWARD achieved for: High Quality Ecology

60 cell

MonoX™ NeON is a high-yield module developed by LG Electronics. The company tries to concentrate its R&D capacities on developing a product which can practically increase the benefits (or values) to customers, beyond just the efficiency. This allowed the company to successfully introduce a high-yield module, MonoX™ NeON, which uses highly efficient n-type materials, elaborate process control adopting a semiconductor processing solution, and double-sided structure.

APPROVED PRODUCT
KM 564573 1215
Photovoltaic Modules

NEW

N-type Material

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

NEW

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, which leads to less LID.

NEW

Nano Level Control

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

NEW

Double Sided Cell Structure

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

16.8kg Light Weight | Convenient Installation | EL Test | Current Sorting | 25yrs Linear Warranty | ~+3% Positive Power Tolerance

About LG Electronics

LG Electronics is a global big player who has been committed to expanding its capacity, based on solar energy business as its future growth engine. We embarked on a solar energy source research program in 1985, supported by LG Group's rich experience in semi-conductor, LCD, chemistry, and materials industry. We successfully released the first MonoX™ series on the market, in 2010, which were exported to 32 countries in 2 years, thereafter. In 2013, MonoX™ NeON won "Intersolar Award", which proved it's the leader of innovation in the industry.

Inspections Division
Date: 12/23/13

onoX™ NeON

LG300N1C-A3 / LG295N1C-A3 / LG290N1C-A3 / LG285N1C-A3

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* NEW

* 1) 1st year: 98%, 2) After 2nd year: 0.7%p 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*)

	300 W	295 W	290 W	285 W
MPP voltage (Vmpp)	32.0	31.8	31.8	31.6
MPP current (Impp)	9.40	9.28	9.15	9.03
Open circuit voltage (Voc)	39.8	39.7	39.6	39.5
Short circuit current (Isc)	9.98	9.85	9.70	9.59
Module efficiency (%)	18.3	18.0	17.7	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*)

	300 W	295 W	290 W	285 W
Maximum power (Pmpp)	220	215	212	208
MPP voltage (Vmpp)	29.3	29.1	29.0	28.9
MPP current (Impp)	7.50	7.40	7.30	7.20
Open circuit voltage (Voc)	36.9	36.8	36.7	36.6
Short circuit current (Isc)	8.05	7.94	7.82	7.73
Efficiency reduction (from 1000 W/m² to 200 W/m²)	< 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.

LG Life's Good

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.
"LG Life's Good" is a registrated trademark of LG Corp.
All other trademarks are the property of their respective owners.
DS-N-60-C-US-F-EN-31002

Copyright © 2013 LG Electronics. All rights reserved.
10/01/2013