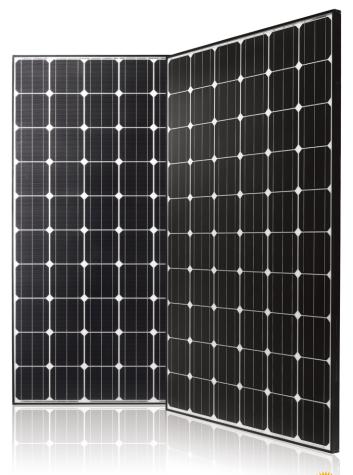




LG300N1C-G3 / LG295N1C-G3 / LG290N1C-G3 / LG285N1C-G3 / LG280N1C-G3



LG Electronics, Inc. (Korea Exchange: 06657.KS) is one of the globally leading companies and technology innovator for electronics, information and communication products. The LG Electronics currently employs more than 91,000 people worldwide in 117 companies. In fiscal year 2011, 48.97 billion USD of revenue was achieved.

LG is one of the world's largest manufacturers of mobile phones, flat screen TVs, air conditioners, washing machines and refrigerators. As a futureoriented company, LG enables others to use technology consisting of renewable energies. LG's high quality solar products are being manufactured in LG's leading production facility in South Korea.









KM 564573 BS EN 61215



# LG's High Efficient Cell Technology

Driven by LG's own N-type technology, LG's highefficiency modules will provide customers with high economic benefits.



#### Convenient Installation

LG modules are carefully designed to benefit installers by allowing quick and easy installations throughout the carrying, grounding, and connecting stages of modules.



#### **Light and Robust**

With a weight of just 16.8 kg, LG modules are proven to demonstrate outstanding durability against external pressure up to 5400 Pa.



#### 100% EL Test Completed

All LG modules pass Electroluminescence inspection. This EL inspection detects cracks and other imperfections unseen by the naked eye.



### **Reliable Warranties**

LG stands by its products with the strength of a global corporation and sterling warranty policies. LG offers a 10 year product limited warranty and a 25 year limited linear output warranty.



# **Positive Power Tolerance**

LG provides rigorous quality testing to solar modules to assure customers of the stated power outputs of all modules, with a positive nominal tolerance starting at 0%.



# LG300N1C-G3 / LG295N1C-G3 / LG290N1C-G3 / LG285N1C-G3 / LG280N1C-G3

## Mechanical Properties

| Cells                  | 6 x 10                           |  |  |  |  |
|------------------------|----------------------------------|--|--|--|--|
| Cell vendor            | LG                               |  |  |  |  |
| Cell type              | Monocrystalline                  |  |  |  |  |
| Cell dimensions        | 156 x 156 mm² / 6 x 6 in²        |  |  |  |  |
| # 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                                       | IEC 61215, IEC 61730-1/-2, UL 1703,                   |  |  |
|--|---|--|--|
|  | ISO 9001, IEC 61701(In progress),                     |  |  |
|  | DLG-Fokus Test "Ammonia Resistance",<br>(In progress) |  |  |
| Product warranty                                     | 10 years  |  |  |
| Output warranty of Pmax (measurement Tolerance ± 3%) | Linear warranty*                                      |  |  |
|  |   |  |  |

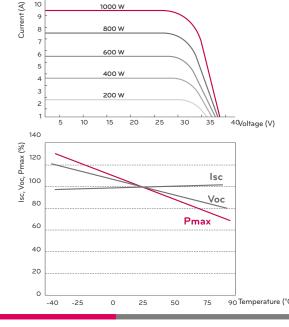
<sup>\* 1) 1</sup>st year: 97%, 2) After 2nd year: 0.7% annual degradation, 3) 80.2% for 25 years

# Temperature Coefficients

| NOCT | 45 ± 2 ℃  |  |
|------|-----------|--|
| Pmpp | -0.42 %/K |  |
| Voc  | -0.31 %/K |  |
| Isc  | 0.03 %/K  |  |

#### Characteristic Curves

1000 W



## Electrical Properties (STC\*)

|                                | 300 W              | 295 W | 290 W | 285 W | 280 W |  |
|--------------------------------|--------------------|-------|-------|-------|-------|--|
| MPP voltage (Vmpp)             | 32.0               | 31.9  | 31.8  | 31.6  | 31.5  |  |
| MPP current (Impp)             | 9.42               | 9.30  | 9.19  | 9.09  | 8.97  |  |
| Open circuit voltage (Voc)     | 39.5               | 39.3  | 39.2  | 39.0  | 38.9  |  |
| Short circuit current (Isc)    | 10.0               | 9.91  | 9.80  | 9.68  | 9.56  |  |
| Module efficiency (%)          | 18.3               | 18.0  | 17.7  | 17.4  | 17.1  |  |
| Operating temperature (°C)     | -40 ~ +90          |       |       |       |       |  |
| Maximum system voltage (V)     | 600(UL), 1000(IEC) |       |       |       |       |  |
| Maximum series fuse rating (A) | 15                 |       |       |       |       |  |
| Power tolerance (%)            | 0 ~ +3             |       |       |       |       |  |
|                                |                    |       |       |       |       |  |

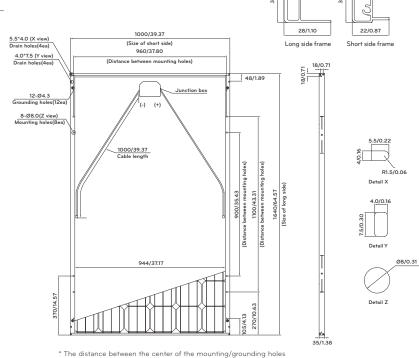
 $<sup>^{*}</sup>$  STC (Standard Test Condition): Irradiance 1000 W/m², module temperature 25 °C, AM 1.5

### Electrical Properties (NOCT\*)

|  | 300 W   | 295 W | 290 W | 285 W | 280 W |  |
|--|---------|-------|-------|-------|-------|--|
| Maximum power (Pmpp)                                 | 220     | 216   | 213   | 210   | 206   |  |
| MPP voltage (Vmpp)                                   | 29.3    | 29.2  | 29.1  | 28.9  | 28.8  |  |
| MPP current (Impp)                                   | 7.51    | 7.42  | 7.33  | 7.25  | 7.15  |  |
| Open circuit voltage (Voc)                           | 36.5    | 36.3  | 36.2  | 36.0  | 35.9  |  |
| Short circuit current (Isc)                          | 8.08    | 7.98  | 7.89  | 7.80  | 7.70  |  |
| Efficiency reduction<br>(from 1000 W/m² to 200 W/m²) | < 4.5 % |       |       |       |       |  |

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

# Dimensions (mm/in)





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