

# LG NeON™ 2 BiFacial

LG300N1T-G4

## 60 cell

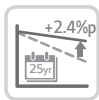
LG NeON™ 2 BiFacial is designed to utilize both sides of PV module for absorbing more light and generating more energy. It also adopts Cello technology which replaces 3 busbars with 12 thin wires to enhance power output and reliability. It is possible to produce an abundance of output energy with LG NeON™ 2 BiFacial.



- Cello Technology  
- Transparent backsheet



### Key Features



#### Enhanced Performance Warranty

LG NeON™ 2 BiFacial has an enhanced performance warranty. The annual degradation has fallen to 0.6%/yr from 0.7%/yr of the previous LG NeON™ module.



#### Better Performance on a Sunny Day

LG NeON™ 2 BiFacial now performs better on sunny days thanks to its improved temperature coefficient.



#### High Power Output

LG NeON™ 2 BiFacial has been designed using LG's new Cello technology which is able to achieve high rear efficiency cell over 92.5% based on front efficiency.



#### Bifacial Energy Yield

It is possible to produce 25% more energy and output energy can be increased more under optimized surrounding conditions.



#### More Generation on a Cloudy Day

LG NeON™ 2 BiFacial gives good performance even on a cloudy day due to its low energy reduction in weak sunlight.



#### Near Zero LID (Light Induced Degradation)

The n-type cells used in LG NeON™ 2 BiFacial have almost no boron, which may cause the initial efficiency to drop, leading to less LID.

#### About LG Electronics

LG Electronics is a global big player, committed to expanding its operations with the solar market. The company first embarked on a solar energy source research program in 1985, supported by LG Group's vast experience in the semi-conductor, LCD, chemistry and materials industries. In 2010, LG Solar successfully released its first MonoX® series to the market, which is now available in 32 countries. The NeON™ (previous MonoX® NeON) and The NeON™2 won the "Inter-solar AWARD" in 2013 and 2015, which demonstrates LG Solar's lead, innovation and commitment to the industry.

LG300N1T-G4

# LG NeON™ 2BiFacial

## 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              |
| Front Load             | 6000 Pa                          |
| Rear Load              | 5400 Pa                          |
| Weight                 | 17.0 ± 0.5 kg                    |
| Connector Type         | MC4                              |
| Junction Box           | IP67 with 3 Bypass Diodes        |
| Length of Cables       | 1000 mm x 2ea                    |
| Glass                  | High Transmission Tempered Glass |
| Frame                  | Anodized Aluminium               |

## Certifications and Warranty

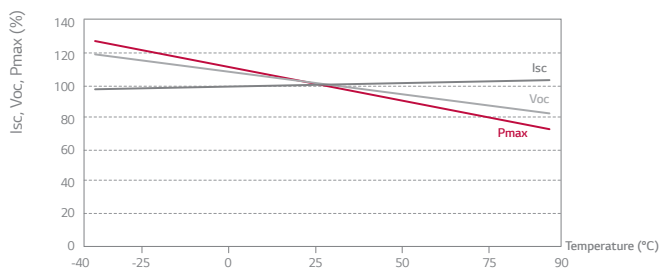
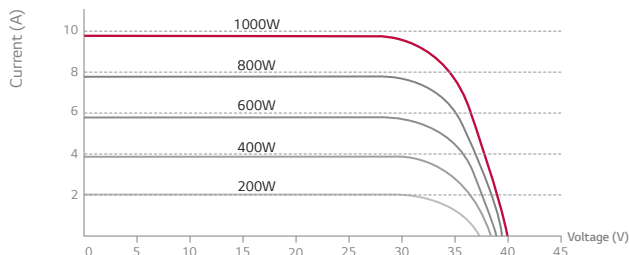
|                         |                                      |
|-------------------------|--------------------------------------|
| Certifications          | IEC 61215, IEC 61730-1/-2            |
|                         | IEC 62716 (Ammonia corrosion test)   |
|                         | IEC 61701 (Salt mist corrosion test) |
|                         | ISO 9001                             |
| Fire Rating             | Class C                              |
| Product Warranty        | 12 Years                             |
| Output Warranty of Pmax | Linear Warranty <sup>1</sup>         |

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

## Temperature Characteristics

|      |        |        |
|------|--------|--------|
| NOCT | [ °C ] | 45 ± 3 |
| Pmax | [%/°C] | -0.38  |
| Voc  | [%/°C] | -0.28  |
| Isc  | [%/°C] | 0.03   |

## Characteristic Curves



## Electrical Properties (STC<sup>2</sup>)

| Module                      | LG300N1T-G4 | Bifacial Gain |       |       |       |
|-----------------------------|-------------|---------------|-------|-------|-------|
|                             |             | 10%           | 20%   | 25%   |       |
| Maximum Power (Pmax)        | [W]         | 300           | 330   | 360   | 375   |
| MPP Voltage (Vmpp)          | [V]         | 32.9          | 32.9  | 32.9  | 33.0  |
| MPP Current (Impp)          | [A]         | 9.15          | 10.07 | 10.98 | 11.44 |
| Open Circuit Voltage (Voc)  | [V]         | 40.1          | 40.1  | 40.2  | 40.3  |
| Short Circuit Current (Isc) | [A]         | 9.65          | 10.68 | 11.65 | 12.14 |
| Module Efficiency           | [%]         | 18.3          | 20.1  | 22.0  | 22.9  |
| Operating Temperature       | [°C]        | -40 ~ +90     |       |       |       |
| Maximum System Voltage      | [V]         | 1000          |       |       |       |
| Maximum Series Fuse Rating  | [A]         | 20            |       |       |       |
| Power Tolerance (%)         | [%]         | 0 ~ +3        |       |       |       |

<sup>2</sup> STC (Standard Test Condition): Irradiance 1000 W/m<sup>2</sup>, Module Temperature 25 °C, AM 1.5

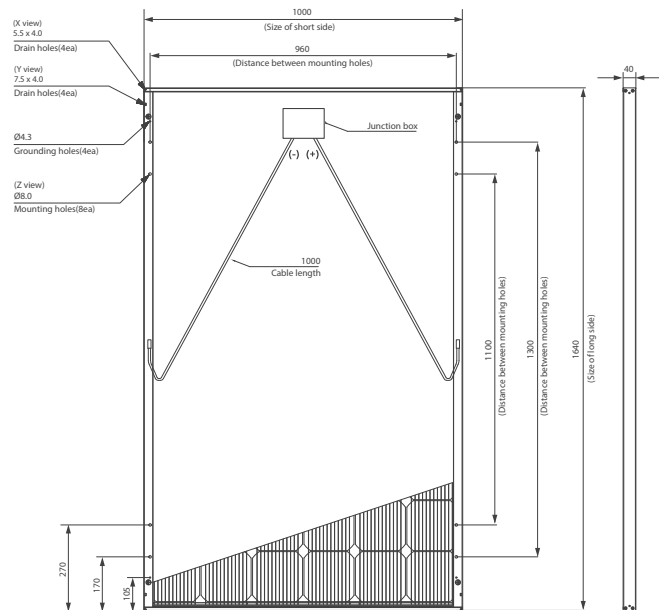
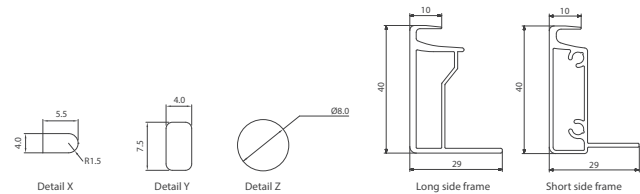
The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion.

## Electrical Properties (NOCT<sup>3</sup>)

| Module                      | LG300N1T-G4 |       |
|-----------------------------|-------------|-------|
| Maximum Power (Pmax)        | [W]         | 221.9 |
| MPP Voltage (Vmpp)          | [V]         | 30.4  |
| MPP Current (Impp)          | [A]         | 7.29  |
| Open Circuit Voltage (Voc)  | [V]         | 37.3  |
| Short Circuit Current (Isc) | [A]         | 7.77  |

<sup>3</sup> NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m<sup>2</sup>, module temperature 20 °C, wind speed 1 m/s

## Dimensions (mm)



The distance between the center of the mounting/grounding holes.

