



LG330/335N1C-V5

THE HIGH PERFORMER

**UP TO 19.6% MODULE EFFICIENCY** 

## Awards Received By LG Solar™

















## THE NeON® 2 - 335W - THE PANEL OF THE FUTURE AVAILABLE TODAY

The LG NeON® 2 has seen many improvements, from longer warranties and higher efficiency to stronger frames and better wind loading. This panel is ideal for homes seeking a visually pleasing solar panel and for roofs where space is tight or where future system expansions are considered e.g. to incorporate battery storage.

The LG NeON® modules with their double sided cells and CELLO technology absorb light from the front and the back of the cell. This technology sets a new standard for innovation and was recognised with the 2015 Photovoltaic Innovation Award at the Intersolar Industry Event in Germany. LG also won the 2016 Intersolar award for our new NeON BiFacial range.



## **Great Visual Appearance**

LG NeON® 2 panels have been designed with appearance in mind. Their black cells, black frames and thinner wire busbars give an aesthetically pleasing uniform black appearance. Your home deserves the LG NeON® 2.



## 25 Years Product Warranty (Parts & Labour)

The LG product warranty is 15 years longer than many competitor's standard 10 years and covers 25 years. The Warranty is provided by LG Electronics Australia and New Zealand. The warranty includes replacement labour and transport.



#### More Power per Square Metre

LG NeON® 2's 335W are a similar physical size to many competing 300W panels. This means with the LG NeON® 2 335W you get 11% more electricity per square metre than a 300W panel. So you can install more kW of solar on your roof with the LG NeON® 2.



#### Improved 25 Year Performance Warranty

The initial degradation of the module has been improved from -3% to -2%, in the 1st year and the annual rate of degradation has fallen from -0.7%/year to -0.33%/ year thereafter. This brings an 90.08% warranted output after 25 years, compared to 80.2% for many competing panels.

## ABOUT LG SOLAR™

LG Electronics embarked on a solar energy research programme in 1985, using our vast experience in semi-conductors, chemistry and electronics. LG Solar modules are now available in 32 countries. In 2013, 2015 and 2016 the LG NeON® range won the acclaimed Intersolar Award in Germany, which demonstrates LG Solar's lead in innovation and commitment to the renewable energy industry. Additionally, LG Solar™ won the Australian Top Brand award in 2016, 2017, 2018 and 2019.

With over 200 lesser known brand panels selling in Australia, LG solar panels offer a peace of mind solution, as they are backed by an established global brand.

## KFY FFATURES



#### Proven Field Performance

LG has been involved in a number of comparison tests of the LG panels against many other brand panels. LG NeON® 2 models are consistently among the best performing in these tests.



#### **LG Corrosion Resistance Certification**

LG NeON® 2 panels can be installed confidently right up to the coastline. The panels have received certification for Salt Mist Corrosion to maximum severity 6 and Ammonia Resistance.



## Strict Quality Control Reliable for the Future

The quality control of LG world-class solar production is monitored and improved using Six Sigma techniques via 500+ monitoring points to effectively maintain and improve our uncompromising quality.



# Multi Anti-reflective Coatings Increase Output

LG Solar™ is using an anti-reflective coating on the panels glass as well as on the cell surface to ensure more light is absorbed in the panel and not reflected. More absorbed light means more electricity generation.



## Improved High Temperature Performance

Solar panels slowly lose ability to generate power as they get hotter. LG NeON® 2, has an improved temperature co-efficient to standard modules, which means in hot weather LG NeON® 2 panels will deliver higher output.



### "CELLO" Technology Increases Power

"CELLO" Multi wire busbar cell technology lowers electrical resistance and increases panel efficiency, giving more power per panel and provides a more uniform look to the panel.



#### **Low LID**

The N-type doping of the NeON® cells results in extremely low Light Induced Degradation (LID) when compared with the standard P-type cells. This means more electricity generation over the life of the panel, as the panel degrades less.



### **Extensive Testing Programme**

LG solar panels are tested up to 2 times the International Standards at our in-house testing laboratories, ensuring a very robust and longer lasting solar module.



#### High Wind Load Resistance

LG panels have a strong double walled frame. When it comes to wind forces (rear load) our panels under test withstood a wind load of 4000 pascals.



## Positive Tolerance (0/+3%)

If you buy a 330 Watt panel then the flash test of this panel will show somewhere between 330W and 340W. Some competitor panels have -/+ tolerance, so you could get a flash test result below the rated Watt, meaning you pay for Watts you never get.



## Enhanced low light performance

LG NeON® 2 panels will give better performance under low light, such as early morning or late afternoon compared to many competing panels.



#### Automated Production in South Korea

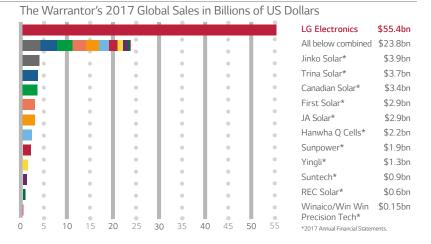
All LG solar panels are manufactured in a custom designed and fully automated production line by LG in Gumi, South Korea ensuring extremely low tolerances. This means great quality and build consistency between panels.

# LG NeON® 2 – ENHANCED. MORE EFFICIENT. ADVANCED.

LG NeON® 2 solar panels now offer even more output. Featuring a classy design and with a total of 60 cells, it can withstand a static front panel load of 5400 pascals. LG has lengthened its product warranty from 10 to 25 years and has improved its linear performance guarantee to 90.08% of nominal output after 25 years. The LG NeON® 2 is an excellent choice for high performing long lasting solar systems.

## LOCAL WARRANTY, GLOBAL STRENGTH

LG Solar™ is part of LG Electronics Inc., a global and financially strong company, with over 50 years of experience in technology. Good to know: LG Electronics Australia Pty Ltd is the warrantor in Australia and NZ for your solar modules. So LG support, via offices in every Australian mainland state and NZ and through our 70 strong, Australia wide dealer network, is only a phone call away.



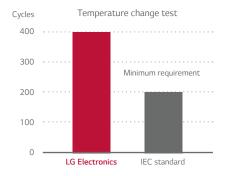
## HIGHER OUTPUT, HIGHER YIELD

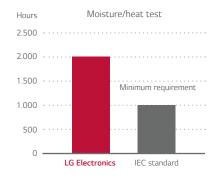
The NeON® Cell produces energy from both the front and the back of the cell. This innovative approach allows the absorption of light from the back of the cell which raises the panel's efficiency and power output. Standard panels only absorb light from the front.



## EXCELLENT QUALITY, THOROUGHLY TESTED

You can rely on LG. We test our products with at least double the intensity specified in the IEC standard. (International Quality Solar Standard).





#### Awards Received By LG Solar™





Our panel range have won a string of International Awards.

## POWERFUL DESIGN, GUARANTEED ROBUST

With reinforced frame design, the LG NeON 2 can under test withstand a front load of 5400 Pa which is the equivalent of 943 kg over the size of the panel. The rear load/wind load of the panel is 4000 Pa.



**4000**Pa



LG offers a 15 year longer product warranty for parts and labour than many competitors 10 years to an impressive 25 years.





#### **Mechanical Properties**

| Mechanical Froperties  |  |
|------------------------|--|
| Cells                  | 6 x 10   |
| Cell Vendor            | LG   |
| Cell Type              | Monocrystalline / N-type                               |
| Cell Dimensions        | 161.7 x 161.7 mm                                       |
| # of Busbar            | 12 (Multi Wire Busbar)                                 |
| Dimensions (L x W x H) | 1686 x 1016 x 40 mm                                    |
| Front Load (test)      | 5400 Pa  |
| Rear Load (test)       | 4000 Pa  |
| Weight                 | 17.1 kg  |
| Connector Type         | Genuine MC4, IP68<br>(Male: PV-KST4) (Female: PV-KBT4) |
| Junction Box           | IP68 with 3 bypass diodes                              |
| Length of Cables       | 2 x 1000 mm  |
| Front cover            | High transmission tempered glass                       |
| Frame                  | Anodised aluminum with protective matt                 |

#### Certifications and Warranty

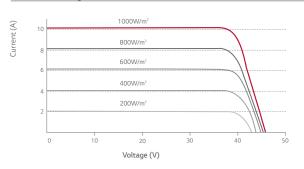
| Certifications and Warranty                              |   |  |  |
|--|---|--|--|
| Certifications   | ISO 9001, ISO 14001, ISO 50001          |  |  |
|  | IEC 61215-1/-1-1/2:2016,                |  |  |
|  | IEC 61730-1/-2:2016, UL1703             |  |  |
|  | OHSAS 1001, PV CYCLE                    |  |  |
|  | IEC 62701:2012 Severity 6               |  |  |
|  | (Salt Mist Corrosion Test)              |  |  |
|  | IEC 62716:2013 (Ammonia Test)           |  |  |
| Module Fire Rating                                       | Class C (UL 790, ULC/ORD C 1703)        |  |  |
| Product Warranty   | 25 Years (Manufactured after 1/10/2017) |  |  |
| Output Warranty of Pmax (Measurement Tolerance $\pm$ 3%) | Linear Warranty <sup>1</sup>            |  |  |

<sup>1 1) 1</sup>st year. 98%, 2) After 1st year. 0.33% annual degradation, 3) 90.08% for 25 years

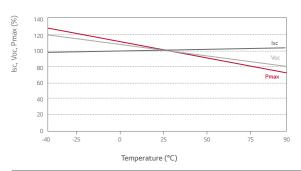
## **Temperature Characteristics**

| NMOT | 42 ± 3 ℃   |
|------|------------|
| Pmax | -0.36 %/°C |
| Voc  | -0.27 %/°C |
| Isc  | 0.03 %/°C  |

### Current - Voltage characteristics at various irradiance levels



## Current - Voltage characteristics at various cell temperatures



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

| Module Type                    | 330 W     | 335 W |  |
|--------------------------------|-----------|-------|--|
| Maximum Power Pmax (W)         | 330       | 335   |  |
| MPP Voltage Vmpp (V)           | 33.7      | 34.1  |  |
| MPP Current Impp (A)           | 9.80      | 9.83  |  |
| Open Circuit Voltage Voc (V)   | 40.9      | 41.0  |  |
| Short Circuit Current Isc (A)  | 10.45     | 10.49 |  |
| Module Efficiency (%)          | 19.3      | 19.6  |  |
| Operating Temperature (°C)     | -40 ~ +90 |       |  |
| Maximum System Voltage (V)     | 1000      |       |  |
| Maximum Series Fuse Rating (A) | 20        |       |  |
| Power Tolerance (%)            | 0~+3      |       |  |

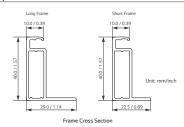
 $<sup>^2</sup>$  STC (Standard Test Condition): Irradiance 1000 W/m², Module Temperature 25 °C, AM 1.5. The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion.

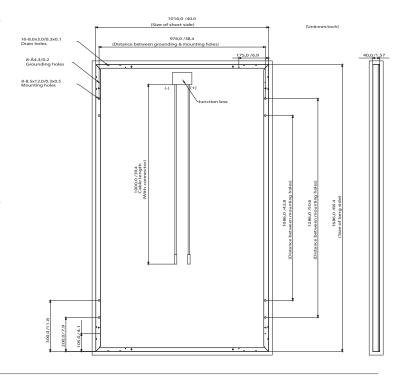
#### Electrical Properties (NMOT<sup>3</sup>)

| Module Type                   | 330 W | 335 W |
|-------------------------------|-------|-------|
| Maximum Power Pmax (W)        | 246   | 250   |
| MPP Voltage Vmpp (V)          | 31.5  | 31.9  |
| MPP Current Impp (A)          | 7.81  | 7.84  |
| Open Circuit Voltage Voc (V)  | 38.4  | 38.5  |
| Short Circuit Current Isc (A) | 8.40  | 8.43  |

<sup>&</sup>lt;sup>3</sup> NMOT (Nominal Module Operating Temperature): Irradiance 800 W/m², ambient temperature 20 °C, wind speed 1 m/s

#### Dimensions (mm)







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Product specifications are subject to change without prior notice.

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