

The Star Performer



LG315/320N1C-G4

UP TO 19.5% MODULE EFFICIENCY











THE NeON™ 2 - THE PANEL OF THE FUTURE AVAILABLE TODAY

The new 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 or electric car charging.

The LG NeON™ modules with their double sided cells and CELLO technology absorb light from the front and the back of the module. This technology sets a new standard for innovation and was recognised with the 2015 Photovoltaic Innovation Award at the Intersolar Industry Event in Germany.



Great Visual Appearance

 $LG\ NeON^TM\ 2$ panels have been designed with appearance in mind. Their black cells, black frames and thinner wires give an aesthetically pleasing uniform black appearance. Your home deserves the $LG\ NeON^TM\ 2$.



12 Years Product Warranty (Parts & Labour)

LG has extended the product warranty of the LG NeON™ 2 by an additional 2 years from 10 years to 12 years. This includes coverage for labour and transport.



More Power per Square Metre

LG NeONTM 2's 320W are a similar physical size to many conventional 250W panels. This means with the LG NeONTM 2 320W you get 28% more electricity per square metre than a 250W panel. So you can install more kW of solar on your roof with the LG NeONTM 2.



Improved 25 Year Performance Warranty

The initial degradation of cells has been improved from -3% to -2%, in the 1st year and the annual rate of degradation has fallen from -0.7%/year to -0.6%/ year thereafter. This brings an 83.6% warranted output after 25 years, compared to 80% for many standard panels.

LG NeON[™]2

ABOUT LG ELECTRONICS

LG Electronics embarked on a solar energy research programme in 1985, using our vast experience in semi-conductors, chemistry and electronics. In 2010, LG Solar successfully released its first Mono X[®] series, and 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. With over 300 lesser known brands panels selling in Australia, LG solar panels offer a peace of mind solution.

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™ models are consistently among the best performing in these tests.



Additional Certification

LG NeON™ 2 panels have received additional certification including for, Salt Mist Corrosion to maximum severity 6. Ammonia Resistance certification and PID Resistance Tests.



Strict Quality Control Reliable for the Future

The quality control of LG world-class production processes is monitored and improved to Six Sigma quality control standards, which includes 500+ monitoring points to effectively maintain and improve our uncompromising standards.



Multi Anti-reflective Coatings Increase Output

LG 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 $^{\text{TM}}$ 2, has an improved temperature co-efficient to our previous model, which means in high temperatures LG NeON $^{\text{TM}}$ 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.



Extensive Testing Programme

LG solar panels are tested between 2 to 4 times the International Standards at our in-house testing laboratories, ensuring a very robust and longer lasting solar module.



Cyclone Wind Load Resistance

LG modules have a strong double walled frame and screwed corners. When it comes to wind forces (rear load) many competitor modules are certified to 2400 Pascals. LG modules are certified to more than double - 5400 Pascals, making them very sturdy and strong.



Positive Tolerance (0/+3%)

If we sell you a 320 Watt panel then the flash test of this panel will show somewhere between 320W and 329.6W. 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.



Anti PID Technology for Yield Security

PID (Potential Induced Degradation) affects the long term ability of panels to produce high level electricity output. LG panels have anti PID technology and have been successfully tested by leading third party laboratories regarding PID resistance.



Fully 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 consistency between panels.

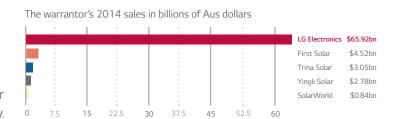
LG NeON™ 2 – ENHANCED. MORE EFFICIENT. ADVANCED.

LG NeON™ 2 solar modules now offer even more performance. Featuring a classy new design and with a total of 60 cells, it can withstand a load of 6,000 pascals. LG is extending its product warranty from 10 to 12 years and improving its linear performance guarantee to at least 83.6% of nominal output after 25 years.

LOCAL WARRANTY, GLOBAL STRENGTH

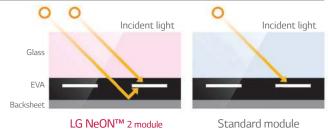
LG Solar is part of LG Electronics Inc., a global and financially strong company, with over 50 years of experience in technology.

Good to know: LG Electronics Australia Pty Ltd is the warrantor in Australia and New Zealand for your solar modules. So LG support is only a local phone call away.



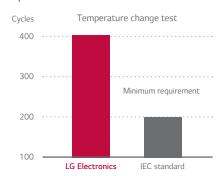
HIGHER OUTPUT, HIGHER YIELD

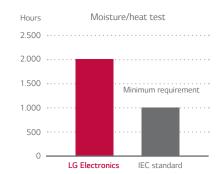
The NeON™ Cell produces energy from both the front and the back of the cell. This innovative approach allows the absorption of light from the back of the cell which raises the panel's efficiency.



EXCELLENT QUALITY, INDEPENDENTLY TESTED

You can rely on LG. We test our products with double the intensity specified in the IEC standard.







Our panels have also won a string of International awards.

POWERFUL DESIGN, GUARANTEED ROBUST

With reinforced frame design, LG NeON™ 2 can endure a front load up to 6000 Pa and a rear load up to 5400 Pa.



Extended Product Warranty

LG has also extended the product warranty for parts and labour from an industry average 10 years to an impressive 12 years.

Mechanical Properties

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Cells	6 x 10		
Cell Vendor	LG		
Cell Type	Monocrystalline / N-type		
Cell Dimensions	156.75 x 156.75 mm		
# 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	Genuine MC4, IP67		
Junction Box	IP67 with 3 bypass diodes		
Length of Cables	2 x 1000 mm		
Front cover	High transmission tempered glass		
Frame	Anodised aluminum with protective black coating		

Certifications and Warranty

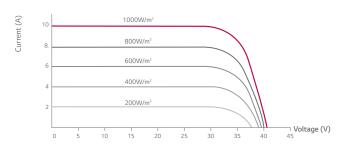
Certifications	ISO 9001	
	IEC 61215, IEC 61730-1/-2	
	62716 (Ammonia Test)	
	IEC 61701(Salt Mist Corrosion Test)	
Module Fire Rating	Class C	
Product Warranty	12 Years	
Output Warranty of Pmax (Measurement Tolerance ± 3%)	Linear Warranty ¹	

¹ 1) 1st year. 98%, 2) After 2nd year. 0.6%p annual degradation, 3) 83.6% for 25 years

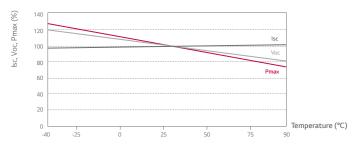
Temperature Characteristics

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

Current - Voltage characteristics at various irradiance levels



Current - Voltage characteristics at various cell temperatures



Electrical Properties (STC²)

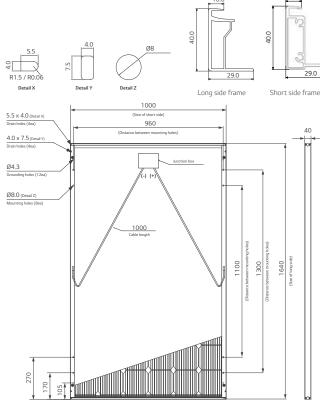
Module Type	315 W	320 W
Maximum Power Pmax (W)	315	320
MPP Voltage Vmpp (V)	33.2	33.6
MPP Current Impp (A)	9.50	9.53
Open Circuit Voltage Voc (V)	40.6	40.9
Short Circuit Current Isc (A)	10.02	10.05
Module Efficiency (%)	19.2	19.5
Operating Temperature (°C)	-40~+90	
Maximum System Voltage (V)	1000	
Maximum Series Fuse Rating (A)	20	
Power Tolerance (%)	0~+3	

Electrical Properties (NOCT³)

Module Type	315 W	320 W
Maximum Power Pmax (W)	233	236
MPP Voltage Vmpp (V)	30.7	31.1
MPP Current Impp (A)	7.57	7.59
Open Circuit Voltage Voc (V)	37.7	38.0
Short Circuit Current Isc (A)	8.06	8.09

 $^{^3}$ NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m², ambient temperature 20 °C, wind speed 1 m/s

Dimensions (mm)



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





² 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.

The typical change in module efficiency at 200 W/m² in relation to 1000 W/m² is -2.0%.