

# YOUR HOME DESERVES THE NeON<sup>®</sup> 2 Black - 330W/335W

The LG NeON® 2 Black has seen many improvements that really matter, from longer warranties and higher efficiency to lower degradation. 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<sup>®</sup> 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. LG Solar<sup>™</sup> also won the 2016 Intersolar award for our NeON<sup>®</sup> Bifacial range.



#### **Great Visual Appearance**

LG NeON® 2 Black panels with their black cells, black frames and black backsheet give an aesthetically pleasing uniform appearance. Your home deserves the great looking LG NeON® 2 Black.



#### More Power per Square Metre

LG NeON® 2 Black's 335W panels are a similar physical size to many competing 300W panels. This means up to 11.6% more electricity per square metre with LG NeON® 2 Black. So you can get more power from your roof space with LG panels.



#### 25 Years Product Warranty (Parts & Labour)

The LG product warranty is 15 years longer than 10 years offered by many competing brands. The Warranty is provided by LG Electronics Australia and New Zealand. The warranty includes replacement labour and transport.



#### Improved 25 Year Performance Warranty

The initial degradation of LG NeON<sup>®</sup> 2 panels is -2%, in the 1st year and the annual rate of degradation is -0.33%/ year thereafter. This brings an 90.08% warranted output after 25 years, compared to 80.2% for many competing brand panels.

#### Made in Korea

Call LG Solar on 1300 152 179

## 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 over 50 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.

# KEY FEATURES



### Proven Field Performance

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



### Corrosion Resistance Certification

LG NeON<sup>®</sup> 2 Black 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 production processes is monitored and improved to Six Sigma quality control standards, which includes 500+ monitoring points to effectively maintain and improve our uncompromising quality.



#### Multi Anti-reflective Coatings Increase Output

LG Solar<sup>™</sup> 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 Black, has an improved temperature co-efficient to many competing panels, which means in hot weather LG NeON® 2 Black 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 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 panel under test withstood a wind load of 4000 pascals.



### Positive Tolerance (0/+3%)

A 335 Watt panel flash test will show somewhere between 335W and 345W. Some competing 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<sup>®</sup> 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

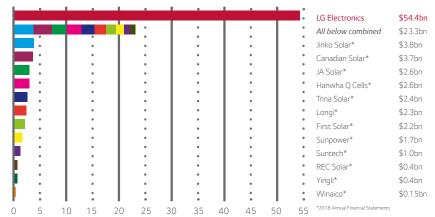
All LG Solar panels are manufactured in a custom designed and fully automated production line by LG in Gumi, South Korea ensuring extremely low tolerances. This means great quality and build consistency between panels.

# LG NeON<sup>®</sup> 2 BLACK – ELEGANT DESIGN. GREAT LOOKS.

As its name suggests, the monocrystalline LG NeON<sup>®</sup> 2 Black solar module is completely black and will look great on your roof. Featuring the black CELLO look, it can withstand under test a static front panel load of 5400 Pascals and a rear load of 4000 Pascals which provides more strength and durability than a standard panel. LG is also improving its linear performance guarantee to at least 90.08% of nominal output after 25 years.

# LOCAL WARRANTY, GLOBAL STRENGTH

LG Solar<sup>™</sup> 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. The Warrantor's 2018 Global Sales in Billions of US Dollars



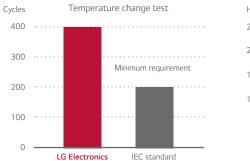
### UNDERSTATED ELEGANCE FOR BEAUTIFUL ROOFS

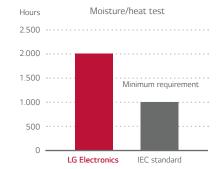
The LG NeON® 2 Black solar module featuring a black anodised frame and black backing sheet looks totally black. Its uniform design looks much more elegant than the blue colour cells and grey/silver frames of standard panels.



# 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 943kg over the size of the panel. The rear load/wind load of the panel under test is 4000 Pa.



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



# LG330N1K-V5 | LG335N1K-V5 LG NeON<sup>®</sup>2 Black

#### **Mechanical Properties**

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 (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 black coating

#### Certifications and Warranty

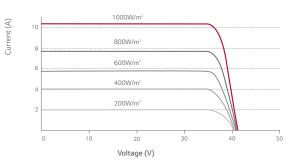
	ISO 9001, ISO 14001, ISO 50001	
Certifications	130 3001,130 14001,130 30001	
	IEC 61215-1/-1-1/2:2016,	
	IEC 61730-1/2:2016, UL1703	
	OHSAS 18001	
	IEC 61701:2012 Severity 6	
	(Salt Mist Corrosion Test)	
	IEC 62716:2013 (Ammonia Test)	
Module Fire Performance	Type 2 (UL 1703),	
	Class C (UL 790, ULC/ORD C 1703)	
Product Warranty	25 Years	
Output Warranty of Pmax (Measurement Tolerance $\pm$ 3%)	Linear Warranty <sup>1</sup>	

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

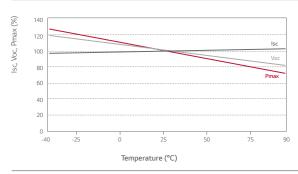
#### **Temperature Characteristics**

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

#### Current - Voltage characteristics at various irradiance levels



Current - Voltage characteristics at various cell temperatures





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

Module Type	330 W	335 W		
Maximum Power Pmax (W)	330	335		
MPP Voltage Vmpp (V)	34.1	34.5		
MPP Current Impp (A)	9.69	9.72		
Open Circuit Voltage Voc (V)	41.0	41.1		
Short Circuit Current lsc (A)	10.27	10.31		
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			

 $^2$  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.

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

Module Type	330 W	335 W		
Maximum Power Pmax (W)	247	251		
MPP Voltage Vmpp (V)	31.9	32.4		
MPP Current Impp (A)	7.73	7.76		
Open Circuit Voltage Voc (V)	38.5	38.7		
Short Circuit Current Isc (A)	8.26	8.28		

 $^3$  NMOT (Nominal Module Operating Temperature): Irradiance 800 W/m², ambient temperature 20 °C, wind speed 1 m/s, Spectrum AM 1.5.

#### Dimensions (mm)

