



# The Star Performer

## LG NeON<sup>®</sup> R

LG355/360Q1C-A5

**UP TO 20.8% MODULE EFFICIENCY**



### THE NeON<sup>®</sup> R - A SOLAR MILESTONE FOR LG

Many standard 60 cell modules produce 260W power (15.9% efficiency) The new LG NeON<sup>®</sup> R at a similar physical size reaches an incredible 360W (20.8% efficiency), making it ideal for solar systems seeking visually pleasing panels and for roofs where space is tight. The NeON R is also the right panel when future solar system expansion is considered or as a combo install of panels and solar energy storage via batteries as well as electric vehicle charging. The LG NeON<sup>®</sup> R is a very powerful module and with its 30 Multi Ribbon Busbar at the rear of the module sets a new standard of innovation and is the result of LGs extensive solar R&D investment.



#### Great Visual Appearance

LG NeON<sup>®</sup> R panels have been designed with appearance in mind. Their black cells, black frames and no metal solders or wires give an aesthetically pleasing uniform black appearance. Your home deserves the LG NeON<sup>®</sup> R.



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

The LG product warranty is 2 years longer than the industry standard 10 years and covers 12 years. The warranty is held by LG Electronics Australia/NZ, not some overseas company. The warranty includes replacement labour and transport.



#### More Power per Square Metre

LG NeON<sup>®</sup> Rs 360W are a similar physical size to many conventional 260W panels. This means with the LG NeON<sup>®</sup> R 360W you get 38.4% more electricity per square metre than a 260W panel. So you can install more kW of solar on your roof with the LG NeON<sup>®</sup> R.



#### Improved 25 Year Performance Warranty

The NeON<sup>®</sup> R has a much better 25 year performance warranty than over 95% of panels on the Australian market. It will still achieve at least 87.6% of rated output after 25 years, compared to 80.2% for standard panels. The annual rate degradation rate is 0.4% compared to 0.7% for standard panels.

## 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<sup>®</sup> series, and LG Solar modules are now available in 32 countries. In 2013, 2015 and 2016 the LG NeON<sup>™</sup> 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 200 lesser known brands panels selling in Australia, LG solar panels offer a peace of mind solution.

## KEY FEATURES



### Proven Field Performance

LG has been involved in a number of comparison tests of the LG panels against many other brand panels. LG NeON<sup>®</sup> R are LG Solar's most efficient and greatest performing modules.



### Corrosion Resistance Certifications

LG NeON<sup>®</sup> R panels can be installed confidently right up to the coastline. The panels have received certifications for Salt Mist Corrosion to maximum severity 6 and Ammonia Resistance, as well as passed 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 NeON<sup>®</sup> R 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<sup>®</sup> R, has an improved temperature co-efficient to our previous models, which means in high temperatures LG NeON<sup>®</sup> R panels will deliver higher electricity output.



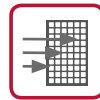
### Heading: Multi-Ribbons Increases Power

The NeON<sup>®</sup> R 30 multi-ribbon busbar technology hidden at the rear of the module, under the backing sheet, 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<sup>®</sup> 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. 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, which provides at least double the strength and durability to a standard module.



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

If we sell you a 360 Watt panel then the flash test of this panel will show somewhere between 360W and 370.1W. 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.

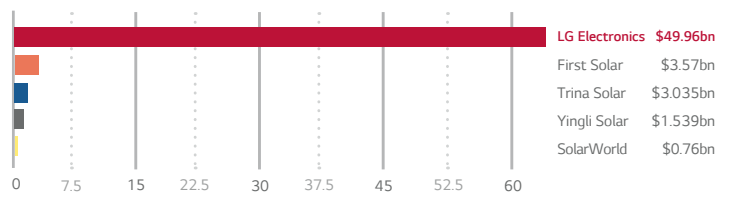
## LG NEON<sup>®</sup> R – QUALITY & HIGH EFFICIENCY IS OUR PASSION.

The NeON<sup>®</sup> R is LG's most efficient solar module range. Featuring an innovative new design which allows an incredible 38% more electricity per m<sup>2</sup> than a standard 260W panel, it can also withstand at least twice the wind load to normal standard panels. The 12 year product warranty is 2 years longer than the majority of panels on offer and its linear performance guarantee has been improved to at least 87.6% of nominal output after 25 years. This is 7.4% more output guaranteed at year 25, than the standard panels on the market.

### LOCAL WARRANTY, GLOBAL STRENGTH

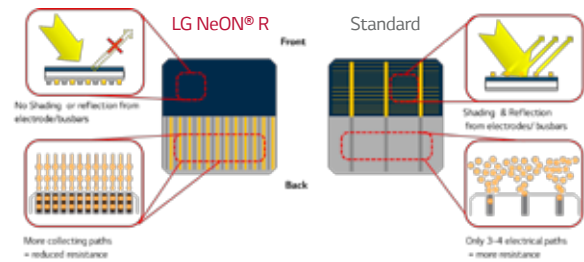
LG Solar is part of LG Electronics Inc., a global and financially strong company, with over 50 years of experience in technology. Good to know: LG Electronics Australia Pty Ltd is the warrantor in Australia and New Zealand for your solar modules. So LG support, via offices in every Australian mainland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

The warrantor's 2015 sales in billions of Aus dollars



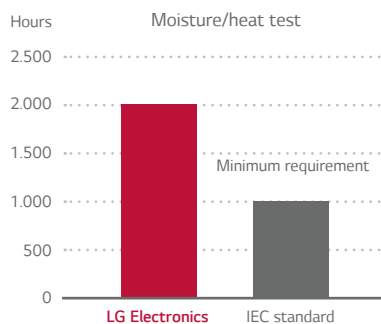
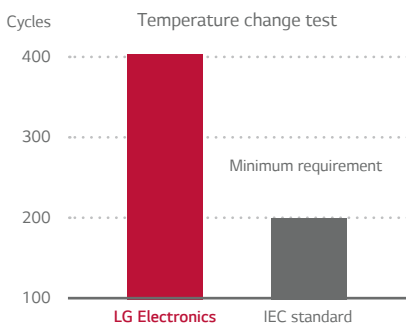
### HIGHER OUTPUT, HIGHER YIELD

The new NeON<sup>®</sup> R module range has moved the busbars to the rear of the module, allowing a bigger front cell surface to be exposed to light and therefore generating more electricity. With 30 multi-ribbon busbars on the rear, compared to 3 or 4 by conventional panels, LG has moved solar panel design forward, via this innovative approach, and increasing panel output as a result.



### EXCELLENT QUALITY, INDEPENDENTLY TESTED

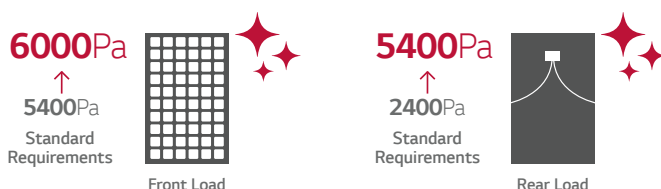
You can rely on LG. We test our products with double the intensity specified in the IEC standard.



Our panels have also won a string of International awards.

### POWERFUL DESIGN, GUARANTEED ROBUST

With reinforced frame design, the LG NeON<sup>®</sup> R can endure a front load of 6000 Pa which is the equivalent of 1048 kg in weight over the size of the module. The rear load/wind load of the module is 5400 Pa which is more than twice the wind load resistance of standard modules (2400 Pa).



### Extended Product Warranty

# 10yrs + 2yrs

LG offers a two year longer product warranty for parts and labour from an industry average 10 years to an impressive 12 years.

### Mechanical Properties

Cells	6 x 10
Cell Vendor	LG
Cell Type	Monocrystalline / N-type
Cell Dimensions	161.7 x 161.7 mm
# of Busbar	30 (Multi Ribbon Busbar)
Dimensions (L x W x H)	1700 x 1016 x 40 mm
Front Load	6000 Pa
Rear Load	5400 Pa
Weight	18.5 kg
Connector Type	Genuine MC4, IP67 (Male: PU-KST4)
Junction Box	IP67 with 3 bypass diodes (Female: PV-KBT4)
Length of Cables	2 x 1000 mm
Front cover	High transmission tempered glass
Frame	Anodised aluminum with protective black coating

### Certifications and Warranty

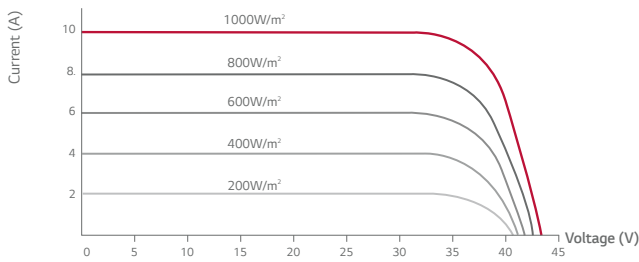
Certifications	ISO 9001
	IEC 61215, IEC 61730-1/-2
	62716 (Ammonia Test)
	IEC 61701 (Salt Mist Corrosion Test)
Module Fire Rating	Class C
Product Warranty	12 Years
Output Warranty of Pmax (Measurement Tolerance ± 3%)	Linear Warranty <sup>1</sup>

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

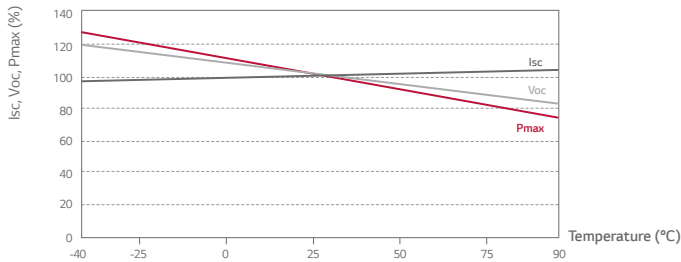
### Temperature Characteristics

NOCT	44 ± 3 °C
Pmax	-0.30 %/°C
Voc	-0.24 %/°C
Isc	0.04 %/°C

### Current – Voltage characteristics at various irradiance levels



### Current – Voltage characteristics at various cell temperatures



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

Module Type	355 W	360 W
Maximum Power Pmax (W)	355	360
MPP Voltage Vmpp (V)	36.6	36.1
MPP Current Impp (A)	9.71	9.82
Open Circuit Voltage Voc (V)	43.5	43.6
Short Circuit Current Isc (A)	10.61	10.61
Module Efficiency (%)	20.6	20.8
Operating Temperature (°C)	-40 ~ +90	
Maximum System Voltage (V)	1000	
Maximum Series Fuse Rating (A)	20	
Power Tolerance (%)	0 ~ +3	

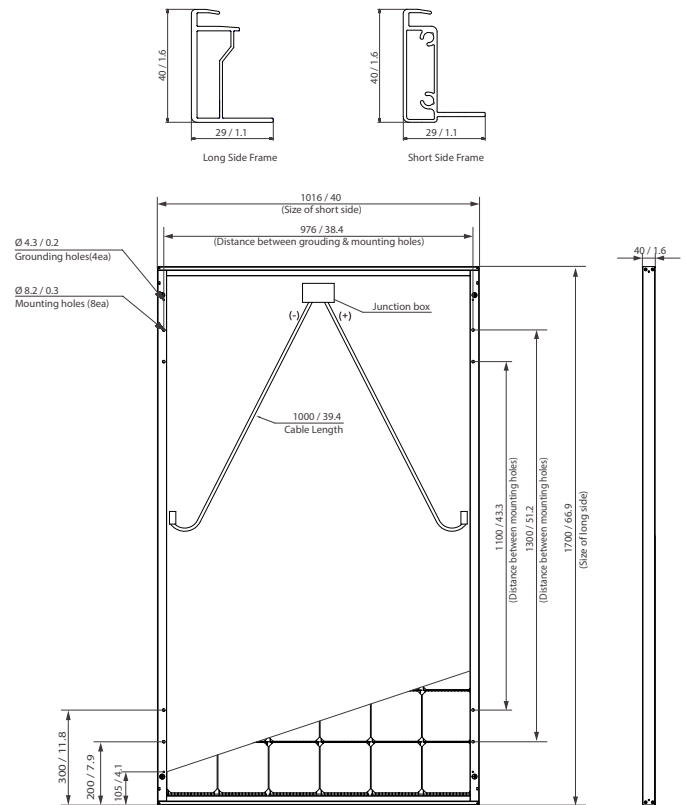
<sup>2</sup> STC (Standard Test Condition): Irradiance 1000 W/m<sup>2</sup>, Module Temperature 25 °C, AM 1.5. The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion. The typical change in module efficiency at 200 W/m<sup>2</sup> in relation to 1000 W/m<sup>2</sup> is -2.0%.

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

Module Type	355 W	360 W
Maximum Power Pmax (W)	267	271
MPP Voltage Vmpp (V)	36.5	36.7
MPP Current Impp (A)	7.33	7.39
Open Circuit Voltage Voc (V)	40.9	41.1
Short Circuit Current Isc (A)	8.54	8.55

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

### Dimensions (mm)



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



LG Electronics Australia Pty Ltd  
Solar Business Group  
2 Wonderland Drive, Eastern Creek, NSW 2766  
Ph: (02) 8805 4038  
E-Mail: solar.sales@lge.com.au  
www.lgenergy.com.au

LG Electronics Inc.  
Solar Business Division  
Twin Building, Western Tower, 11F,  
128, Yeoui-daero, Yeongdeungpo-gu,  
Seoul, 07336, Korea  
www.lg.com/global/business

Product specifications are subject to change without prior notice.  
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