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LG NeON[®] R

LG360/365/370/375 Q1C-V5

THE STAR PERFORMER

UP TO 21.7% MODULE EFFICIENCY

Awards Received By LG Solar[™]



THE NeON[®] R - 375W - A SOLAR MILESTONE FOR LG

Many competing 60 cell panels in Australia and New Zealand produce 300W power. The LG NeON[®] R at a similar physical size reaches an incredible 375W (21.7% efficiency), making it ideal for solar systems seeking visually pleasing panels and for roofs where space is tight.

The LG 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[®] R is a very powerful module. The 30 multi ribbon busbars at the rear of the module is the result of LG's extensive Solar R&D investment.



Great Visual Appearance

LG NeON[®] R panels have been designed with appearance in mind. Their black cells, black frames and no metal solders or wires on the front of the panel give an aesthetically pleasing uniform black appearance. Your home deserves the LG NeON[®] R.



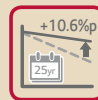
25 Years Product Warranty (Parts & Labour)

The LG product warranty on the NeON R is 15 years longer than many competitors 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[®] R's 375W are a similar physical size to many competing 300W panels. This means with the LG NeON[®] R 375W you get 25% more electricity per square metre than a 300W panel. So you can install more kW of solar on your roof with the LG NeON[®] R.















Improved 25 Year Performance Warranty

The NeON[®] R has a better 25 year performance warranty than many of panels on the Australian market. It will still achieve 90.8% of rated output after 25 years, compared to 80.2% for many competing panels. The annual degradation rate after first year is 0.3% compared to 0.7% for many competing 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[®] series, and 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. LG solar panels offer a peace of mind solution.

KEY FEATURES

 <p>Proven Field Performance</p> <p>LG has been involved in a number of comparison tests of the LG panels against many other brand panels and performed very well. The LG NeON[®] R is LG Solar's most efficient and highest output panel range.</p>	 <p>Low LID</p> <p>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.</p>
 <p>Corrosion Resistance Certifications</p> <p>LG NeON[®] 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.</p>	 <p>Extensive Testing Programme</p> <p>LG solar panels are tested up to 3 times the International Standards at our in-house testing laboratories, ensuring a very robust and longer lasting solar module.</p>
 <p>Strict Quality Control Reliable for the Future</p> <p>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.</p>	 <p>Wind Load Resistance</p> <p>LG modules have a strong double walled frame. When it comes to wind forces (rear load) many competitor modules are certified to 2400 Pascals.</p>
 <p>Multi Anti-reflective Coatings Increase Output</p> <p>LG is using an anti-reflective coating on the NeON[®] 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.</p>	 <p>Positive Tolerance (0/+3%)</p> <p>If we sell you a 375 Watt panel then the flash test of this panel will show somewhere between 375W and 386W. 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.</p>
 <p>Improved High Temperature Performance</p> <p>Solar panels slowly lose ability to generate power as they get hotter. LG NeON[®] R, has an improved temperature co-efficient to many competing modules, which means in hot weather LG NeON[®] R panels will deliver higher electricity output.</p>	 <p>Anti PID Technology for Yield Security</p> <p>PID (Potential Induced Degradation) affects the long term ability of panels to produce high level electricity output. LG panels have anti PID technology (available on request) and have been successfully tested by leading third party laboratories regarding PID resistance.</p>
 <p>Heading: Multi-Ribbons Increases Power</p> <p>The NeON[®] 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.</p>	 <p>Automated Production in South Korea</p> <p>All LG solar panels sold in Australia and New Zealand 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.</p>

LG NeON[®] R – QUALITY & HIGH EFFICIENCY IS OUR PASSION.

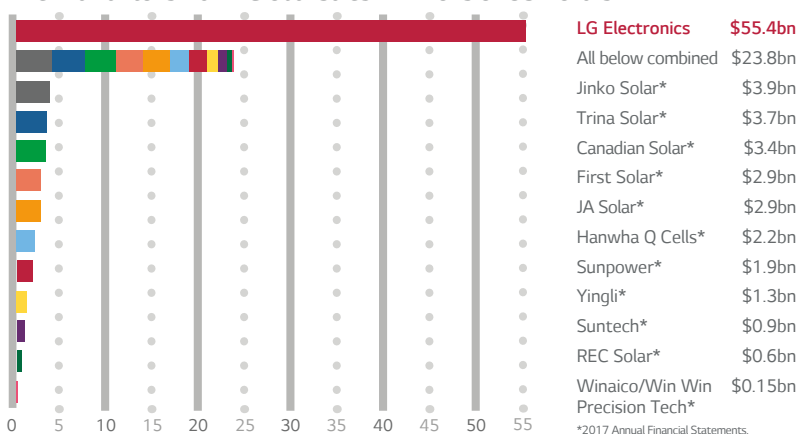
The NeON[®] R is LG's most efficient solar module range. Featuring an innovative design which allows up to 25% more electricity per m² than a standard 300W panel, it can also withstand the wind load of 4000 pascals. The 25 year product warranty is 15 years longer than many panels on offer and its linear performance guarantee has been improved to 90.8% of nominal output after 25 years. The NeON[®] R 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.

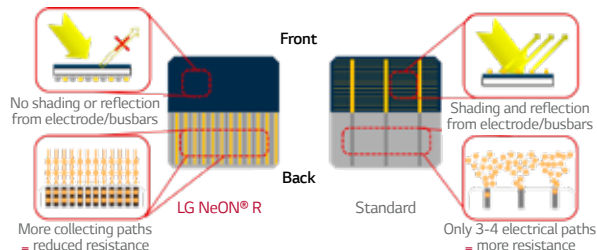
Good to know: LG Electronics Australia Pty Ltd is the warrantor in Australia and NZ for your solar modules. So LG support, via offices in every Australian mainland state and NZ and through our 70 strong Australia wide dealer network, is only a phone call away.

The Warrantor's 2017 Global Sales in Billions of US Dollars



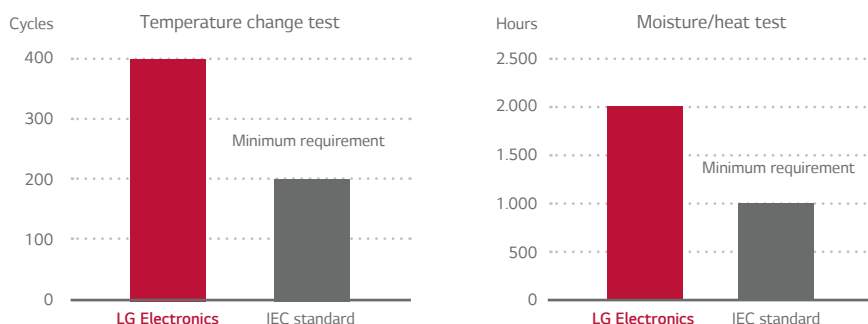
HIGHER OUTPUT, HIGHER YIELD

The NeON[®] 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 many competing panels (at the front), LG has moved solar panel design forward, via this innovative approach, and increasing panel output as a result.



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).



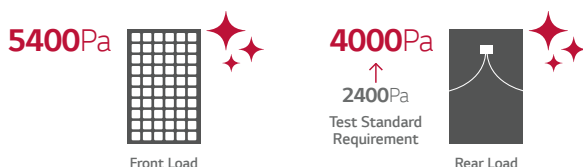
Awards Received By LG Solar[™]



Our panel range have won a string of International Awards.

POWERFUL DESIGN, GUARANTEED ROBUST

With reinforced frame design, the LG NeON[®] R can endure a front load of 5400Pa which is the equivalent of 943kg in weight over the size of the module. The rear load/wind load of the module is 4000Pa which is more than the wind load resistance required in the test standard (2400Pa).



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

10yrs + 15yrs



Mechanical Properties

Cells	6 x 10
Cell Vendor	LG
Cell Type	Monocrystalline / N-type
Cell Dimensions	161.7 x 161.7 mm
Cell Colour	Black/Blue (Similar to Pantone PMS 5004)
# of Busbar	30 (Multi Ribbon Busbar)
Dimensions (L x W x H)	1700 x 1016 x 40 mm
Front Load	5400 Pa
Rear Load	4000 Pa
Weight	17.5 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

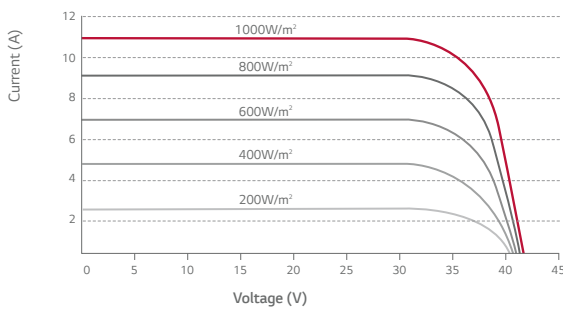
Certifications	ISO 9001, ISO 14001, ISO 50001
	IEC 61215-1/-1-1/2:2016, IEC 61730-1/-2:2016, UL1703
	OHSAS 1001, PV CYCLE
	IEC 61701:2012 Severity 6 (Salt Mist Corrosion Test)
	IEC 62716:2013 (Ammonia Test)
Module Fire Rating	Class C (UL 790, ULC/ORD C 1703)
Product Warranty	25 Years
Output Warranty of Pmax (Measurement Tolerance ± 3%)	Linear Warranty ¹

¹ 1) After first year: 98%, 2) After second year: 0.3% annual degradation, 3) 25 years: 90.8%

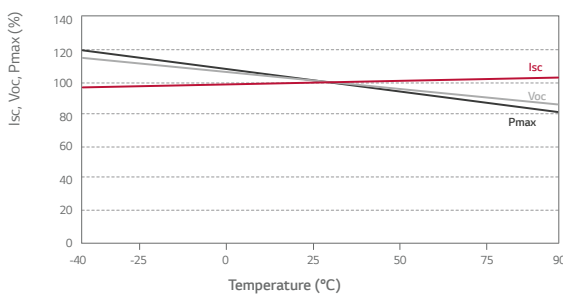
Temperature Characteristics

NOCT	44 ± 3 °C
Pmax	-0.30 %/°C
Voc	-0.24 %/°C
Isc	0.037 %/°C

Current – Voltage characteristics at various irradiance levels



Current – Voltage characteristics at various cell temperatures



Electrical Properties (STC²)

Module Type	360W	365 W	370 W	375W
Maximum Power Pmax (W)	360	365	370	375
MPP Voltage Vmpp (V)	36.5	36.7	37.0	37.2
MPP Current Impp (A)	9.87	9.95	10.01	10.09
Open Circuit Voltage Voc (V)	42.7	42.8	42.8	42.8
Short Circuit Current Isc (A)	10.79	10.80	10.82	10.83
Module Efficiency (%)	20.8	21.1	21.4	21.7
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 (NMOT³)

Module Type	360W	365 W	370 W	375W
Maximum Power Pmax (W)	270	275	279	282
MPP Voltage Vmpp (V)	36.4	36.6	36.9	37.1
MPP Current Impp (A)	7.45	7.51	7.55	7.61
Open Circuit Voltage Voc (V)	40.2	40.2	40.3	40.3
Short Circuit Current Isc (A)	8.69	8.70	8.71	8.72

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)

