

# Glen Clark & Co are proud to be part of the LG Dealer network.

Please note that LG solar panels will assist in generating more electricity than standard solar panels. The reason is that the LG panels both the NeON2 and the Mono X 2 models have a number of features, which assist in the generation of power and for which LG have won prestigious International Awards.

Overall in local Australian tests LG panels have delivered between 3 and 10 % more yield than competitor panels on a kW per kW compared basis. The technical features in LG panels for this higher output are:

### 1. 12 wire bus-bars ("CELLO" Technology Increases Power) compared to 3 or 4 bus-bars as standard

The LG "CELLO" Multi wire bulbar cell technology lowers electrical resistance and increases panel efficiency, giving more power per panel and providing a more uniform look to the panel. In 2015 LG won the Intersolar Award in Germany for this innovation. **YOUR BENEFIT:** Higher electricity output than conventional panels in all weather conditions and latest technology ensures your panel stays relevant in future years.

### 2. Proven field performance

LG and other companies, including consumer organisation Choice with the help of the CSIRO have been involved in a number of comparison tests of the LG modules against many other brand panels. LG Mono X2 and NeON2 panels are consistently one of the highest performing panels in these tests. In the Choice test conducted between October 2015 and February 2016 the LG NeON 300W won against 14 competitors as the highest output per watt panel. **YOUR BENEFIT:** Improved performance in all weather conditions.

## 3. Lower degradation than industry standard

Overtime solar panels loose production capacity. LG has reduced the initial degradation of our Mono X panels by applying our new LiLy (Improvement for lifetime yield) Technology, which controls the reaction of Boron and Oxygen, a key factor in light induced degradation (LID). The NeON2 also has very low Light Induced degradation, due to the use of N type treatment of the cells which uses phosphorous as a replacement for Boron. **YOUR BENEFIT:** Less reduction of electricity production capacity than conventional panels as the panel ages.

### 4. Improved High Temperature Performance

Solar panels slowly lose ability to generate power as they get hotter. LG Mono X2 and NeON2 have one of the best temperature performance characteristics, which means even in very high temperatures our panels will deliver higher output than standard panels. **YOUR BENEFIT:** Better performance on hot days than most conventional panels means more power generates to use to run airconditioning, pool pumps and fans for example.

The sample chart below shows the output performance by one panel of LG NeON 300(red chart) versus the LG Mono X 285W (blue chart) and a standard 260W panel (green chart) in Sydney on 8th October 2016.



Other important information:

Overall the solar industry is going through a period of consolidation and it is expected that some of the current panel offerings in Australia will consolidate and leave the market. So the question is - which panel do I pick for my long term warranty. LG has been manufacturing electrical goods since 1958 and have one of most stringent quality control procedures when manufacturing their solar cells and solar modules. LG has been in solar research

since the mid 1980s. Module production started in 2009 and current capacity is 1200 MW with plans for 3

Gigawatt capacity within the next 2 years. The manufacturing process is vertically integrated and this means that LG undertakes and controls from silicon wafer processing to manufacturing the cells and the finished solar panels. Over 500 quality control processes are being managed to build the modules within LG owned factories.

LG Electronics has many offices in over 100 countries including USA, Japan, China, India, Australia and New Zealand. In Australia they have offices in every mainland city and the solar unit is based in Sydney.

Since 2011 LG solar has distributed close to 90MW of panels being more than 300 000 panels to Australian customers with a 2 panels being returned. LG has its own state-of-the-art intensive panel testing laboratory certified by four international leading testing organisations (TÜV, IEC, Intertek and UL) as testing under world class conditions. In October 2016, LG is the only solar manufacturer so far who has obtained this four way top certification and their testing facilities are one of the world's best.

In order to be sold in Australia solar modules have to be tested to and pass the IEC standard tests once. LG solar panels are tested in their internal testing laboratory between 2 and up to 4 times the IEC standards, ensuring a very robust and long lasting solar module. LG solar panels are manufactured in a fully automated manufacturing facility in Gumi, South Korea and come with a 12 year parts and labour product warranty and 25 year performance warranty held here in Australia by LG Electronics Australia Pty Ltd. This is 2 years longer product warranty than industry standard.

The LG NeON 2 and Mono X 2 solar module range offers excellent performance from low light to peak sun. The new, premium 320W NeON2 panels are LG's most efficient solar panel, optimizing roof space and producing more electricity than standard crystalline panels. The LG NeON range won the Intersolar Award in Europe for innovation in 2013, 2015 and 2016, as well as a range of other international awards, including Top Brand, Europe and Australia in 2016.

Choosing the premium and efficient panels by LG, can over the years save you money on your electricity bills LG panels not only generate solid electricity output, but with their black anodised frame and 12 wire busbars also win in stylish appearance. If you are seeking a quality solar product the LG panels are for you.

Yours sincerely

Glen Clark









The Allan Clark Family Trust T-A Glen Clark & Co ACN 78 892 151 747 Electrical Services Residential & Commercial – Solar Power Design & Installation - Energy Storage Design & Installation