

LG Mono X[®] Plus

LG445/450S2W-U6

GREAT PERFORMANCE

LONG LASTING PANELS

LONG WARRANTIES

Awards Received By LG Solar™



YOU DESERVE THE Mono X[®] Plus

The latest Mono X[®] Plus benefits from years of LG research. The 6th generation LG Mono X[®] Plus offers strong warranties and a higher efficiency, than previous generations.

The LG Mono X[®] Plus will provide many years of clean, reliable energy. Choosing the high quality Mono X[®] Plus is an investment in superior standards of design, manufacture, back up support and warranties. The high quality is the result of our strong commitment to developing a module that delivers reliable, high output for years for a peace of mind solar solution.



More Power per Square Metre

LG Mono X[®] Plus 450W panels are a similar physical size to many conventional 400W panels. This means with the LG Mono X[®] Plus 450W you get 12% more electricity per square meter than a 400W panel. So you can install more kW of solar on your roof with the LG Mono X[®] Plus-U6.



15 Years Product Warranty (Parts & Labour)

The LG product warranty is longer than many competitors standard 10 and 12 years warranties. The local warranty is provided by LG Electronics Australia. The warranty includes replacement labour and transport.



Proven Field Performance

LG has been involved in a number of comparison tests of the LG panels against many other brand panels. LG Mono X[®] range models are consistently among the better performing in these tests.



Improved 25 Year Performance Warranty

The long term annual degradation of cells is -0.4% per year for year 2 to 25. This brings their warranted output degradation to 87.9% after 25 years, compared to 80.7% 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 panels are now available in 32 countries. LG solar panels range won the acclaimed Top Brand PV Award in Australia for 5 years in a row from 2016 to 2020. LG has also been voted WINNER Trusted Brands - Solar Panels by Reader's Digest from over 3,000 Australian consumers surveyed. All these awards demonstrate LG Solar's high reputation amongst the solar installation industry. With many lesser known brand panels selling in Australia, LG solar panels offer a peace of mind solution, as they are backed by a very large established global brand.

KEY FEATURES



Positive Tolerance (0/+3%)

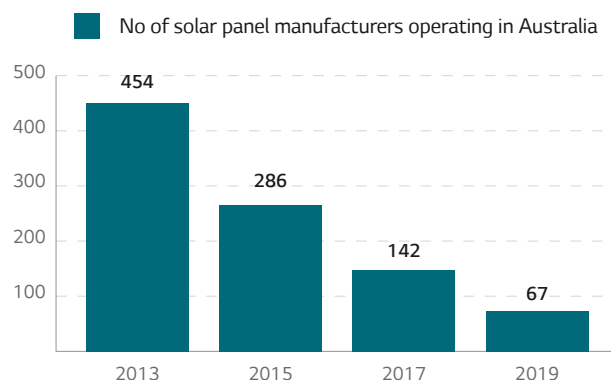
If you buy a 450 Watt panel then the flash test of this panel will show somewhere between 450W and 463W. Some competitor panels have -/+ tolerance, so you could get a flash test result below the rated Watt, meaning you pay for Watts you never get.



Strict Quality Control Reliable for the Future

The quality control of LG world-class solar production is monitored and improved using Six Sigma techniques to effectively maintain and improve our uncompromising quality.

Reducing Number of Solar Panel Manufacturers 2013 - 2019



Fewer and fewer Solar Panel Manufacturers operating in Australia

Number of manufacturers offering solar panels with 25 year performance warranty, registered by the Clean Energy Council – indicating how many have come and gone – leaving customers very exposed.

Awards Received By LG Solar™

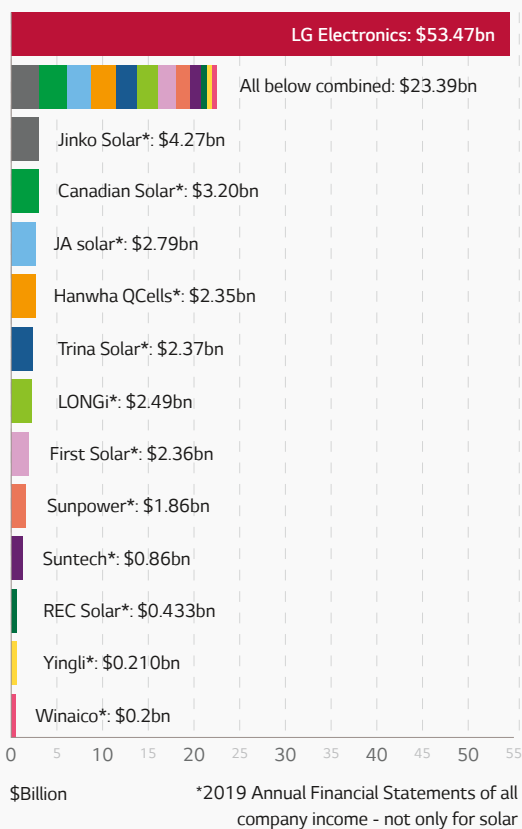


Our panel range have won a string of local and International Awards.

LG Mono X[®] Plus – GREAT PERFORMANCE & STRONG BACKING

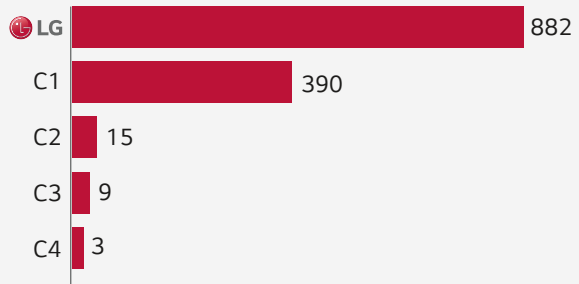
The next generation Mono X[®] Plus by LG combines everything a solar panel needs: long service life and ease of installation as well as a competitive price, and high efficiency and a strong warranty.

The Warrantor's 2019 Sales in Billions of US Dollars*



LG Solar is a Leader in Research

Solar Patent Applications from Major Solar Companies



Number of solar patent applications from major competitors (C1 to C4) in Korea, USA and EU (01/01/2010 - 04/03/2020).

18th Most Innovative Company

Boston Consulting Group's (BCG) 2019 Global Innovation Survey ranked LG Electronics the world's 18th most innovative company. LG Electronics is the only solar manufacturer among the world's 50 most innovative companies.

GREAT WARRANTY

If you buy an LG panel and should there be a warranty issue you will deal with LG Electronics Australia/NZ. You will not have to worry if the importer is still in operation or the manufacturer is located overseas. We are only one phone call away. LG Electronics Australia/NZ backs your product. That's peace of mind. Contact us on solar. sales@lge.com.au or ph 1300 152 179.

LG offers a longer 15 year parts and labour warranty than many competitors who provide 10 and 12 year warranties.



Mechanical Properties

Cells	144 cells (6 x 24)
Cell Type	Monocrystalline / P-type
# of Busbar	9 (Multi Wire Busbar)
Dimensions (L x W x H)	2115 x 1052 x 40 mm
Front Load (Test)	5400 Pa
Rear Load (Test)	2400 Pa
Weight	22.3 kg
Connector Type	Genuine MC4 Stäubli (MC): PV-KST4, PV-KBT4
Junction Box	IP68
Length of Cables	2 x 1295 mm
Front cover	Tempered glass with AR coating
Frame	Anodised aluminum

Certifications and Warranty

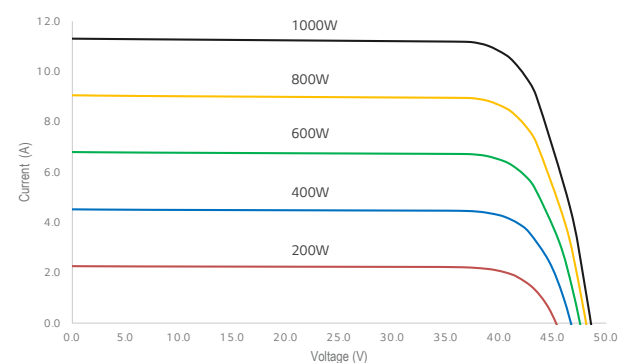
Certifications	ISO 9001, ISO 14001 IEC 61215-1/-1-1/2:2016, IEC 61730-1/2:2016 OHSAS 18001
Module Fire Performance	Class C (UL 790)
Product Warranty	15 Years
Output Warranty of P _{max} (Measurement Tolerance ± 3%)	Linear Warranty ¹⁾

¹⁾ 1st year: 97.5%, 2) After 1st year: 0.40% annual degradation, 3) 87.9% after 25 years.

Temperature Characteristics

NOCT	42 ± 3 °C
P _{max}	-0.365 %/°C
V _{oc}	-0.270 %/°C
I _{sc}	0.038 %/°C

I-V Curves



Electrical Properties (STC²⁾)

Module Type	445W	450W
Maximum Power P _{max} (W)	445	450
MPP Voltage V _{mpp} (V)	40.77	40.91
MPP Current I _{mpp} (A)	10.92	11.01
Open Circuit Voltage (V _{oc} , ±5%)	50.12	50.27
Short Circuit Current (I _{sc} , ±5%)	11.35	11.43
Module Efficiency (%)	20.0	20.2
Operating Temperature (°C)	-40 ~ +85	
Maximum System Voltage (V)	1000 (IEC)	
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	445W	450W
Maximum Power P _{max} (W)	334	338
MPP Voltage V _{mpp} (V)	38.16	38.29
MPP Current I _{mpp} (A)	8.76	8.82
Open Circuit Voltage V _{oc} (V)	47.22	47.36
Short Circuit Current I _{sc} (A)	9.14	9.21

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)

