



LG Mono X[®] Plus

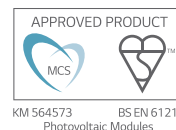
LG285S1C-G4

LG280S1C-G4

LG275S1C-G4

60 cell

LG Mono X[®] Plus is LG Electronics' high-quality monocrystalline module. The quality is the result of our strong commitment to developing a module to improve benefits for customers. Features of LG Mono X[®] Plus include durability, convenient installation, and aesthetic exterior.



Enhanced Performance Warranty

LG Mono X[®] Plus provides the enhanced performance warranty. The initial degradation has been improved from -3% to -2%, and the annual degradation has also changed from -0.7%/yr to -0.6%/yr.



Reduced LID (LiLY Technology)

LG Mono X[®] Plus has improved the initial degradation by applying LG's new LiLY (LID-improvement for Lifetime Yield) Technology, which controls formation of Boron-Oxygen pair, the key factor of LID.



Improved Product Warranty

In addition to the enhanced performance warranty, LG has extended the product warranty of LG Mono X[®] Plus for additional 2 years with its newly reinforced frame design.



Aesthetic Roof

LG Mono X[®] Plus may increase the house value with its shiny black frames. Also, it looks similar to all-black module from a long distance.



Outstanding Durability

With newly reinforced frame design, LG Mono X[®] Plus can endure the static snow load up to 6000 Pa, and the static wind load up to 5400 Pa.





Light and Convenient

LG Mono X[®] Plus is carefully designed to benefit installers by allowing quick installation with a weight of just 17kg and better grips.



About LG Electronics

LG Electronics is a global player who has been committed to expanding its capacity, based on solar energy business as its future growth engine. We embarked on a solar energy source research program in 1985, supported by LG Group's rich experience in semi-conductor, LCD, chemistry, and materials industry. We successfully released the first Mono X[®] series to the market in 2010, which were exported to 32 countries in the following 2 years, thereafter. In 2013, LG NeON[™] (previously known as Mono X[®] NeON) won "Intersolar Award," which proved LG is the leader of innovation in the industry.

Mechanical Properties

Cells	6 x 10
Cell Vendor	LG
Cell Type	Monocrystalline / P-type
Cell Dimensions	156.75 x 156.75 mm / 6 inches
# of Busbar	3
Dimensions (L x W x H)	1640 x 1000 x 40 mm 64.57 x 39.37 x 1.57 inch
Front Load	6000 Pa / 125 psf 
Rear Load	5400 Pa / 113 psf 
Weight	17.0 ± 0.5 kg / 37.48 ± 1.1 lbs
Connector Type	MC4, MC4 Compatible, IP67
Junction Box	IP67 with 3 Bypass Diodes
Length of Cables	2 x 1000 mm / 2 x 39.37 inch
Glass	High Transmission Tempered Glass
Frame	Anodized Aluminum

Certifications and Warranty

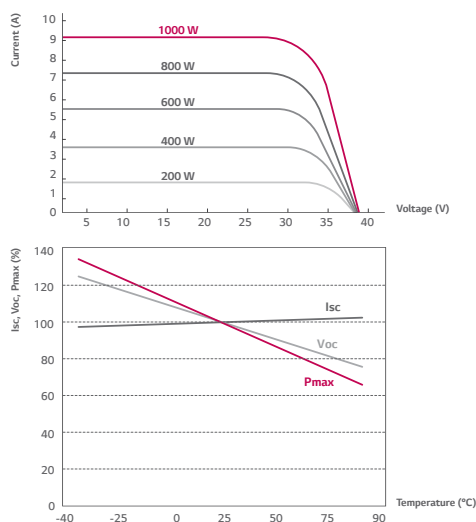
Certifications	IEC 61215, IEC 61730-1/-2 IEC 62716 (Ammonia Test) IEC 61701 (Salt Mist Corrosion Test) ISO 9001 UL 1703
Module Fire Performance (USA)	Type 2 (UL 1703)
Fire Rating (for CANADA)	Class C (ULC/ORD C1703)
Product Warranty	12 years 
Output Warranty of Pmax	Linear warranty* 

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

Temperature Characteristics

NOCT	46 ± 3 °C
Pmpp	-0.42 %/°C
Voc	-0.30 %/°C
Isc	0.03 %/°C

Characteristic Curves



Electrical Properties (STC *)

Module Type	285 W	280 W	275 W
MPP Voltage (Vmpp)	32.3	31.9	31.7
MPP Current (Impp)	8.88	8.78	8.68
Open Circuit Voltage (Voc)	39.0	38.8	38.7
Short Circuit Current (Isc)	9.43	9.33	9.26
Module Efficiency (%)	17.4	17.1	16.8
Operating Temperature (°C)	-40 ~ +90		
Maximum System Voltage (V)	1000 (IEC, UL)		
Maximum Series Fuse Rating (A)	15		
Power Tolerance (%)	0 ~ +3		

* 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.

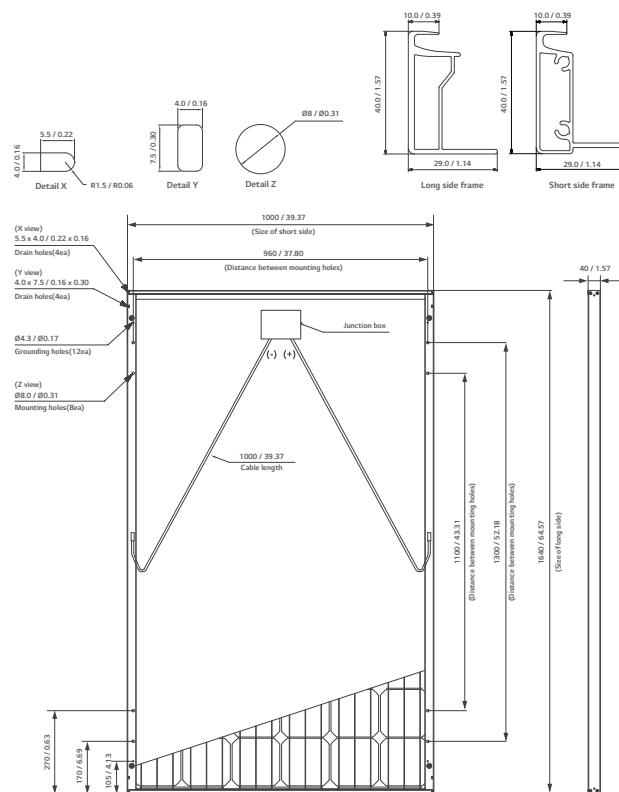
* The typical change in module efficiency at 200 W/m² in relation to 1000 W/m² is -4.5%.

Electrical Properties (NOCT*)

Module Type	285 W	280 W	275 W
Maximum Power (Pmax)	209	205	202
MPP Voltage (Vmpp)	29.5	29.3	29.1
MPP Current (Impp)	7.08	7.00	6.92
Open Circuit Voltage (Voc)	36.1	36.0	35.9
Short Circuit Current (Isc)	7.56	7.52	7.46

* NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m², ambient temperature 20°C, wind speed 1 m/s

Dimensions (mm/in)



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

