

LG Mono X[®] Plus

144

450W | 445W

LG MonoX[®] Plus is LG's robust P-type module that maintains high performance and efficiency.



Feature



15 years Product Warranty

LG Mono X[®] Plus is covered by product warranty to 15 years.



Outstanding Durability

The LG MonoX[®] Plus's stress endurance is rated to handle up to 5,400 Pa on the front side and up to 3,000 Pa on the rear side.

About LG Electronics

LG Electronics is a global big player, committed to expanding its operations with the solar market. The company first embarked on a solar energy source research program in 1985, supported by LG Group's vast experience in the semi-conductor, LCD, chemistry and materials industries. In 2010, LG Solar successfully released its first MonoX[®] series to the market, which is now available in 32 countries. The NeON[®] (previous MonoX[®] NeON), NeON[®]2, NeON[®]2 BiFacial won the "Intersolar AWARD" in 2013, 2015 and 2016, which demonstrates LG Solar's lead, innovation and commitment to the industry.



LG Mono X[®] Plus

LG450S2W-U6 | LG445S2W-U6

General Data

Cell Properties (Material / Type)	Monocrystalline / P-type
Cell Configuration	144 Cells (2 x (6 x 12))
Number of Busbars	9EA
Module Dimensions (L x W x H)	2,115 mm x 1,052mm x 40mm
Weight	22.3kg
Glass (Material)	Tempered Glass with AR coating
Backsheet (Color)	White
Frame (Material)	Anodized Aluminium
Junction Box (Protection Degree)	IP 68 with 3 Bypass Diodes
Cables (Length)*	1,350mm x 2EA
Connector (Type)	PV-C002(IEC 1500V) / MC4 (IEC 1000V)

Certifications and Warranty

Certifications	IEC 61215-1/-1-1/2:2016, IEC 61730-1/2:2016
	ISO 9001, ISO 14001
	OHSAS 18001
Salt Mist Corrosion Test	IEC 61701 : 2012 Severity 6
Ammonia Corrosion Test	IEC 62716 : 2013
Fire Rating	Class C (UL 790)
Product Warranty	15 Years
Output Warranty of Pmax	Linear Warranty*

* 1) First year: 97.5%, 2) After 1st year: 0.4%p annual degradation, 3) 87.9% for 25 years

Temperature Characteristics

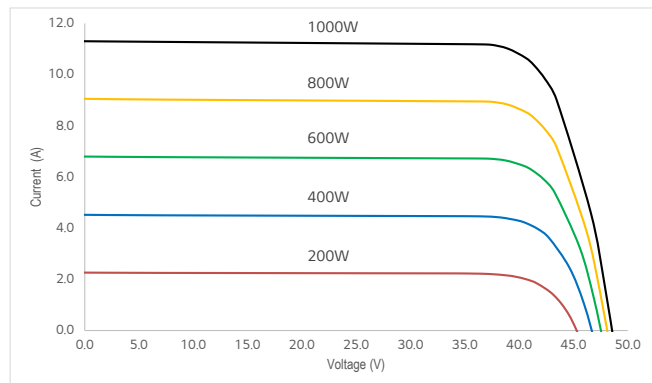
NMOT*	[°C]	42 ± 3
Pmax	[%/°C]	-0.365
Voc	[%/°C]	-0.270
Isc	[%/°C]	0.038

* NMOT (Nominal Module Operating Temperature): Irradiance 800 W/m², Ambient temperature 20 °C, Wind speed 1 m/s, Spectrum AM1.5

Electrical Properties (NMOT)

Model		LG450S2W-U6	LG445S2W-U6
Maximum Power (Pmax)	[W]	338	334
MPP Voltage (Vmpp)	[V]	38.29	38.16
MPP Current (Impp)	[A]	8.82	8.76
Open Circuit Voltage (Voc)	[V]	47.36	47.22
Short Circuit Current (Isc)	[A]	9.21	9.14

I-V Curves



Electrical Properties (STC*)

Model		LG450S2W-U6	LG445S2W-U6
Maximum Power (Pmax)	[W]	450	445
MPP Voltage (Vmpp)	[V]	40.91	40.77
MPP Current (Impp)	[A]	11.01	10.92
Open Circuit Voltage (Voc, ± 5%)	[V]	50.27	50.12
Short Circuit Current (Isc, ± 5%)	[A]	11.43	11.35
Module Efficiency	[%]	20.2	20.0
Power Tolerance	[%]	0~+3	

* STC (Standard Test Condition): Irradiance 1000 W/m², Cell temperature 25 °C, AM 1.5

Measurement Tolerance : ± 3%

Operating Conditions

Operating Temperature	[°C]	- 40 ~ +85
Maximum System Voltage	[V]	1000 (IEC) / 1500(IEC)
Maximum Series Fuse Rating	[A]	20
Mechanical Test Load (Front)	[Pa / psf]	5,400 / 113
Mechanical Test Load (Rear)	[Pa / psf]	3,000 / 62

* Test Load = Design Load x Safety Factor (1.5)

Packaging Configuration

Number of Modules Per Pallet	[EA]	25
Number of Modules Per 40ft HQ Container	[EA]	550
Packaging Box Dimensions (L x W x H)	[mm]	2,165 x 1,130 x 1,225
Packaging Box Gross Weight	[kg]	613

Dimensions (mm / inch)

