

# LG Mono X<sup>®</sup> Plus

LG MonoX<sup>®</sup> Plus is LG's robust P-type module that maintains high performance and efficiency.

## 455W | 450W | 445W

### FEATURES



#### Extended Product Warranty

The LG MonoX<sup>®</sup> Plus now comes with a product warranty extended to 15 years.

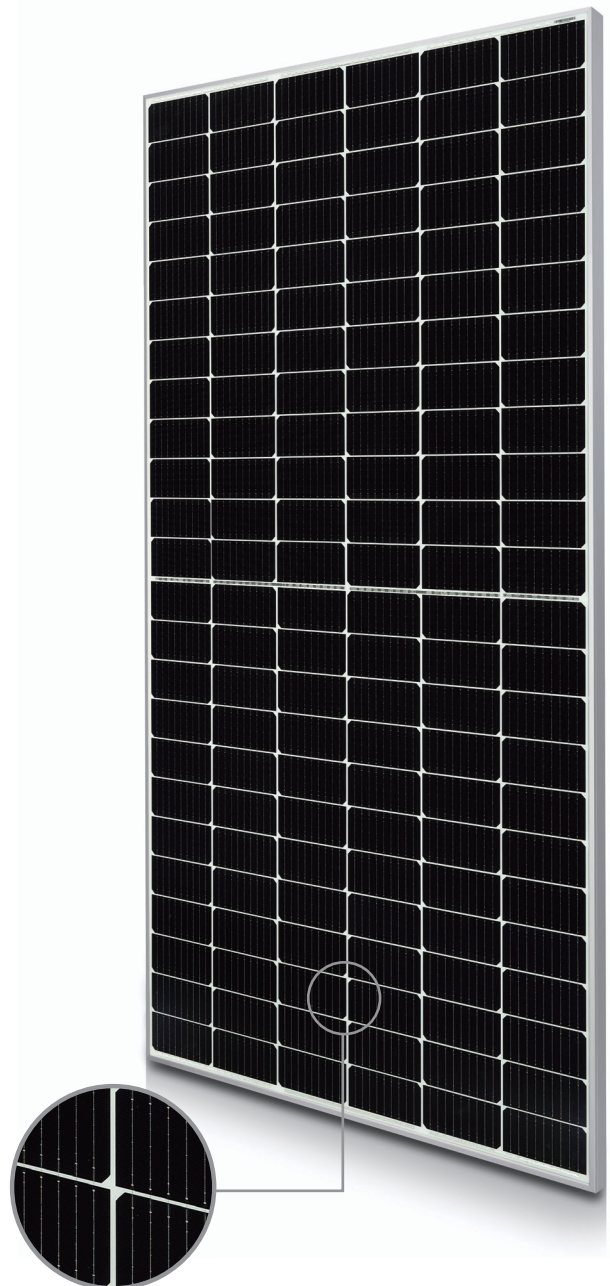


#### Outstanding Durability

LG MonoX<sup>®</sup> Plus is rated to withstand up to 5400 Pa on the front side and up to 3000 Pa on the rear side.



DATA VERIFIED BY  
**SOLAR ANALYTICA.**



144<sub>cell</sub>

#### About LG Electronics

LG is transforming today's solar landscape, offering high-efficiency solar panels for customers who demand high performance, reliability and consistently strong energy yield from a brand they can trust. LG's modules feature high power outputs, outstanding durability, appealing aesthetics and high-efficiency technology.



# LG Mono X<sup>®</sup> Plus

LG455S2W-U6 / LG450S2W-U6 / LG445S2W-U6

## General Data

Cell Properties (Material / Type)	Monocrystalline / P-type
Cell Configuration	144 Cells (2 x (6 x 12))
Number of Busbar	9EA
Module Dimensions	2,115 x 1,052 x 40 mm
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 / Maker)	PV-C002 (IEC 1500V) / MC4 (IEC 1000V)

## Certifications and Warranty

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

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

## Temperature Characteristics

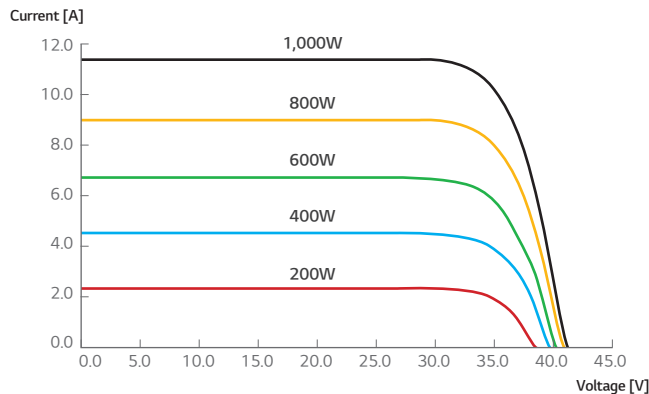
Model		LG455S2W-U6	LG450S2W-U6	LG445S2W-U6
NMOT*	[°C]	42 ± 3	42 ± 3	42 ± 3
Pmax	[%/°C]	-0.365	-0.365	-0.365
Voc	[%/°C]	-0.270	-0.270	-0.270
Isc	[%/°C]	0.038	0.038	0.038

\* NMOT (Nominal Module Operating Temperature)  
: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Wind speed 1m/s, Spectrum AM 1.5

## Electrical Properties (NMOT)

Model		LG455S2W-U6	LG450S2W-U6	LG445S2W-U6
Maximum Power (Pmax)	[W]	342	338	334
MPP Voltage (Vmpp)	[V]	38.45	38.29	38.16
MPP Current (Impp)	[A]	8.89	8.82	8.76
Open Circuit Voltage (Voc)	[V]	47.51	47.36	47.22
Short Circuit Current (Isc)	[A]	9.30	9.21	9.14

## I-V Curves



## Electrical Properties (STC\*)

Model		LG455S2W-U6	LG450S2W-U6	LG445S2W-U6
Maximum Power (Pmax)	[W]	455	450	445
MPP Voltage (Vmpp)	[V]	41.04	40.91	40.77
MPP Current (Impp)	[A]	11.1	11.01	10.92
Open Circuit Voltage (Voc, ±3%)	[V]	50.42	50.27	50.12
Short Circuit Current (Isc, ±4%)	[A]	11.51	11.43	11.35
Module Efficiency	[%]	20.4	20.2	20.0
Power Tolerance	[%]	0 - +3		

\* STC (Standard Test Condition)  
: Irradiance 1000 W/m<sup>2</sup>, Cell temperature 25°C, AM 1.5, Measure tolerance : ±3%

## Operating Conditions

Operating Temperature	[°C]	-40 ~ +85
Maximum System Voltage	[V]	IEC 1500V / IEC 1000V
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)

