

# CLEAR THE STAGE FOR THE ALL-ROUNDER

LG MonoX<sup>®</sup> 2

UPDATE 2016

UP TO 290 WATTS

STRONG GUARANTEES

LG CELLO DESIGN



## LG MonoX<sup>®</sup> 2 – A NEW CLASS OF ITS OWN

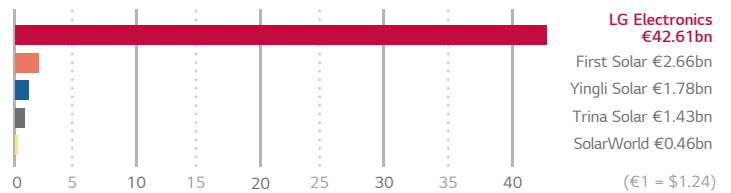
The next generation MonoX<sup>®</sup> 2 by LG combines everything a solar module needs: long service life and ease of use as well as an elegant exterior and high efficiency.

### LOCAL GUARANTOR, GLOBAL SECURITY

LG Solar is part of LG Electronics, a global and financially strong company, with over 50 years of experience.

**Good to know:** LG Electronics is the warrantor for your solar modules.

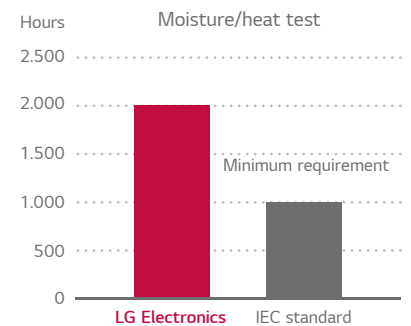
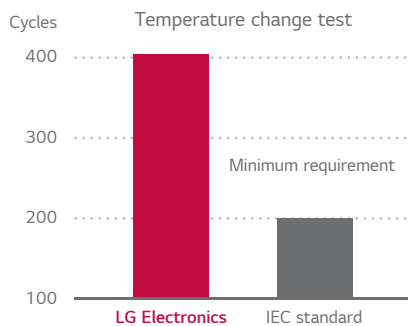
The warrantor's 2013 sales in billions of euros



### EXCELLENT QUALITY, INDEPENDENTLY TESTED

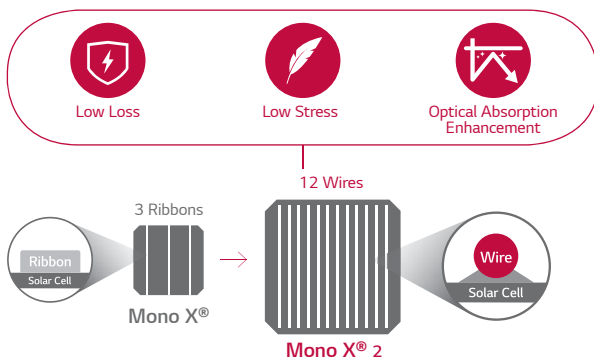
You can rely on LG. We test our products with double the intensity specified in the IEC standard. This quality is valued by installers across Europe, which is why they have awarded our LG solar modules the Top Brand PV stamp of quality for the highest recommendation rates for the third time in a row.

Moreover, they have already received the prestigious Intersolar Award as well as the Plus X Award – one of the biggest innovation awards for technology, sport and lifestyle.



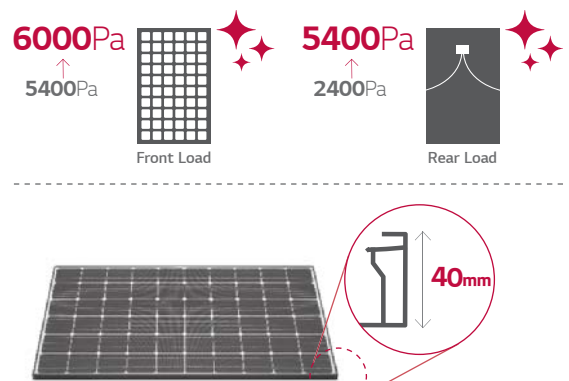
### CELLO TECHNOLOGY

- C**ell Connection
- E**lectrically
- L**ow Loss
- L**ow Stress
- O**ptical Absorption Enhancement



### FRAME & MODULE DESIGN

LG MonoX<sup>®</sup> 2 can endure a static front load up to 6000 Pa, and a static rear load up to 5400 Pa.



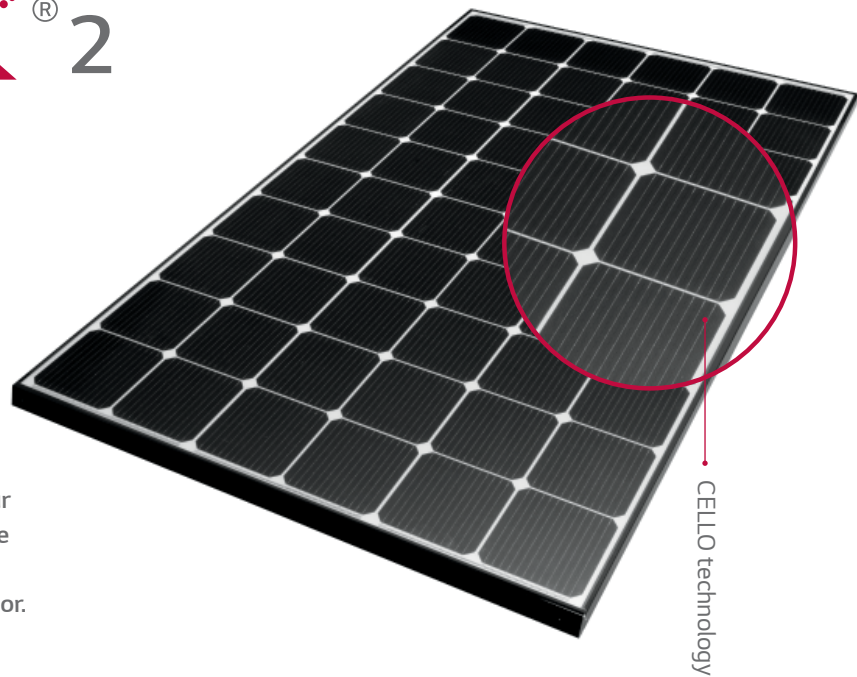
PRODUCT WARRANTY **12yrs**

# LG MonoX<sup>®</sup> 2

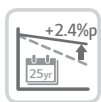
**LG290S1C-L4 | LG285S1C-L4  
LG280S1C-L4**

## 60 Cells

LG MonoX<sup>®</sup> 2 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 MonoX<sup>®</sup> 2 include durability, convenient installation, and aesthetic exterior.



## KEY FEATURES



### Enhanced Performance Warranty

LG MonoX<sup>®</sup> 2 has an enhanced performance warranty. The initial degradation of cells has been improved from -3% to -2%, and the annual rate of degradation has fallen from -0.7%/year to -0.6%/year.



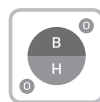
### Improved Product Warranty

As well as the enhanced performance warranty, LG has extended the product warranty of the LG MonoX<sup>®</sup> 2 for an additional 2 years.



### Outstanding Durability

With its newly reinforced frame design, the LG MonoX<sup>®</sup> 2 can endure a front load up to 6000 Pa, and a rear load up to 5400 Pa.



### Reduced LID

The LG MonoX<sup>®</sup> 2 has reduced the initial degradation of solar cells by applying LG's new LiLY (LID-improvement for Lifetime Yield) Technology, which controls the reaction of Boron and Oxygen, a key factor of LID (Light Induced Degradation).



### Aesthetic Roof

LG MonoX<sup>®</sup> 2 has been designed with aesthetics in mind; thinner wires that appear all black at a distance. The product can increase the value of a property with its modern design.



### Light and Convenient

LG MonoX<sup>®</sup> 2 has been carefully designed, it weighs just 17kg and has better grips that allow for quick installation.

### 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<sup>®</sup> series to the market, which is now available in 32 countries. In 2013, the NeON™ (previous MonoX<sup>®</sup> NeON) won the "Intersolar Award", which demonstrates LG Solar's lead, innovation and commitment to the industry.

### Mechanical Properties

Cells	6 x 10
Cell Vendor	LG
Cell Type	Monocrystalline / P-type
Cell Dimensions	156.75 x 156.75 mm
# of Busbar	12 (Multi Wire Busbar)
Dimensions (L x W x H)	1640 x 1000 x 40 mm
Static Load	6000 Pa (snow load)
	5400 Pa (wind load)
Weight	17.0 ± 0.5 kg
Connector Type	MC4, IP67
Junction Box	IP67 with 3 Bypass Diodes
Length of Cables	2 x 1000 mm
Front cover	High Transmission Tempered Glass
Frame	Anodized Aluminum

### Certifications and Warranty

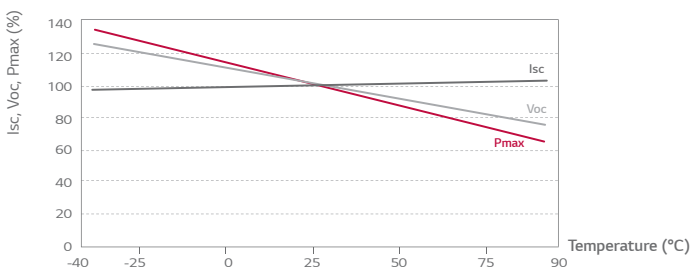
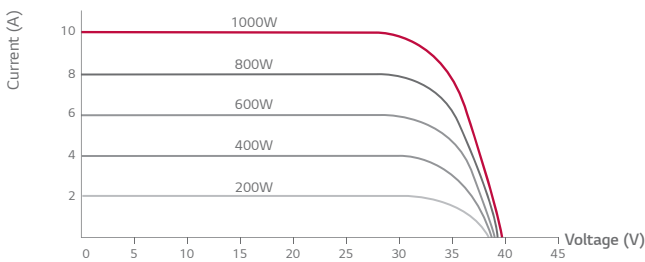
Certifications	IEC 61215, IEC 61730-1/-2
	IEC 62716 (Ammonia Test)
	IEC 61701 (Salt Mist Corrosion Test)
Module Fire Performance	Class C, Fire Class 1 (Italy)
Product Warranty	12 Years
Output Warranty of Pmax (Measurement Tolerance ± 3%)	25 years linear warranty <sup>1</sup>

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

### Temperature Coefficients

NOCT	46 ± 3 °C
Pmpp	-0.39 %/°C
Voc	-0.30 %/°C
Isc	0.05 %/°C

### Characteristic Curves



### Electrical Properties (STC<sup>2</sup>)

	290 W	285 W	280 W
MPP Voltage Vmpp (V)	31.9	31.7	31.5
MPP Current Impp (A)	9.10	9.00	8.90
Open Circuit Voltage Voc (V)	39.0	38.8	38.6
Short Circuit Current Isc (A)	9.61	9.50	9.39
Module Efficiency (%)	17.7	17.4	17.1
Operating Temperature (°C)	-40 ~ +90		
Maximum System Voltage (V)	1000		
Maximum Series Fuse Rating (A)	15		
Power Tolerance (%)	0 ~ +3		

<sup>2</sup> 1) STC (Standard Test Condition): Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM 1.5.  
<sup>2</sup> 2) The typical change in module efficiency at 200 W/m<sup>2</sup> in relation to 1000 W/m<sup>2</sup> is -4.5%.  
<sup>3</sup> 3) Application Class: A, Safety Class: II  
<sup>4</sup> 4) The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion.

### Electrical Properties (NOCT<sup>3</sup>)

	290 W	285 W	280 W
Maximum Power Pmax (W)	211	207	204
MPP Voltage Vmpp (V)	29.1	28.9	28.7
MPP Current Impp (A)	7.25	7.17	7.09
Open Circuit Voltage Voc (V)	35.9	35.7	35.5
Short Circuit Current Isc (A)	7.74	7.65	7.56

<sup>3</sup> NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1 m/s

### Dimensions (mm)

