

CLEAR THE  
STAGE FOR THE  
ALL-ROUNDER

LG MonoX<sup>®</sup> 2

UP TO 290 WATTS

STRONG GUARANTEES

LG CELLO DESIGN



**LG**

Life's Good

LG MonoX<sup>®</sup> 2

[www.lg-solar.com/uk](http://www.lg-solar.com/uk)

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

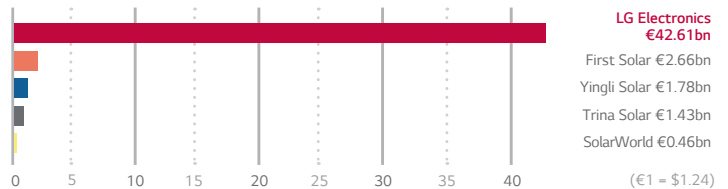
The next generation MonoX<sup>®</sup> 2 by LG combines everything a solar module needs: long service life and ease of use as well as an elegant exterior and high efficiency.

### LOCAL GUARANTOR, GLOBAL SECURITY

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

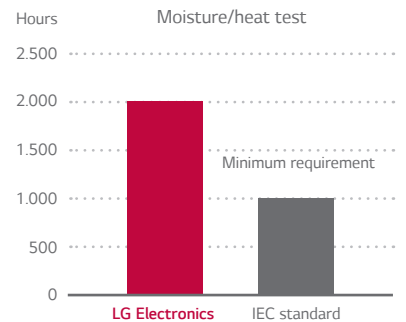
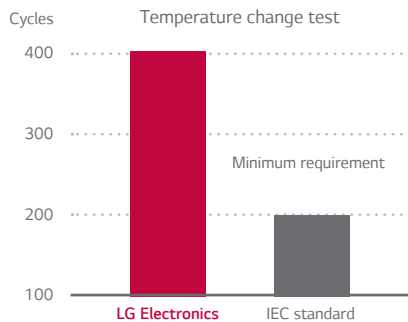
**Good to know:** LG Electronics is the warrantor for your solar modules.

The warrantor's 2013 sales in billions of euros



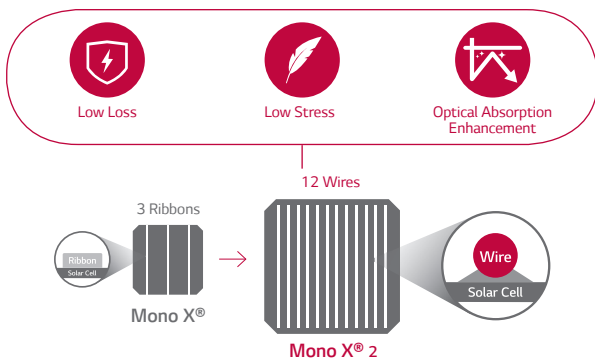
### EXCELLENT QUALITY, INDEPENDENTLY TESTED

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 second 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.



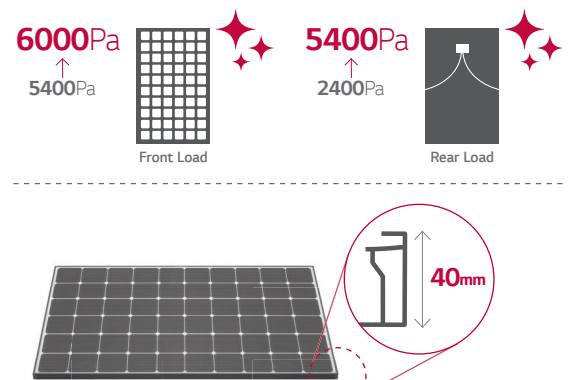
### CELLO TECHNOLOGY

- Cell Connection
- Electrically
- Low Loss
- Low Stress
- Optical Absorption Enhancement



### FRAME & MODULE DESIGN

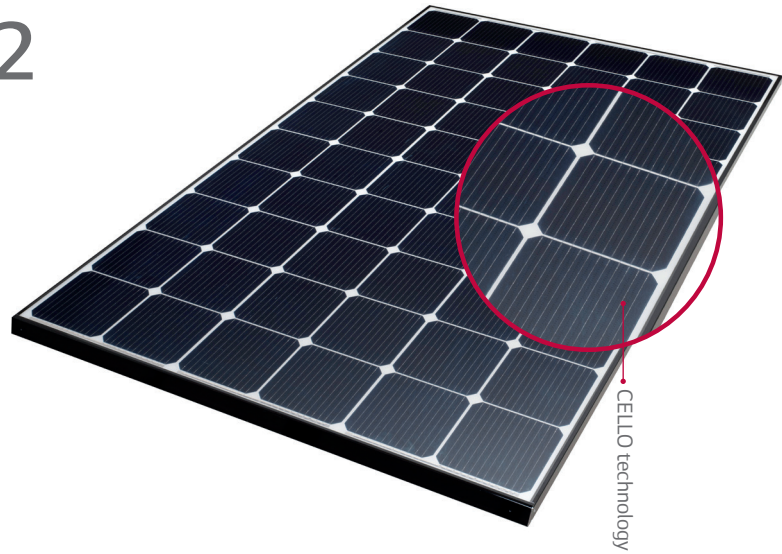
LG MonoX<sup>®</sup> 2 can endure a static front load up to 6000 Pa, and a static rear load up to 5400 Pa.



PRODUCT WARRANTY **12yrs** 10yrs + 2yrs

# LG MonoX<sup>®</sup> 2

LG290S1C-L4 | LG285S1C-L4  
LG280S1C-L4

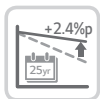


## 60 Cells

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.



### 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).



### 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.



### 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.



### 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.



17 kg

### 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 snow Load       | 6000 Pa                          |
| Static wind Load       | 5400 Pa                          |
| Weight                 | 17.0 ± 0.5 kg                    |
| Connector Type         | MC4                              |
| 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

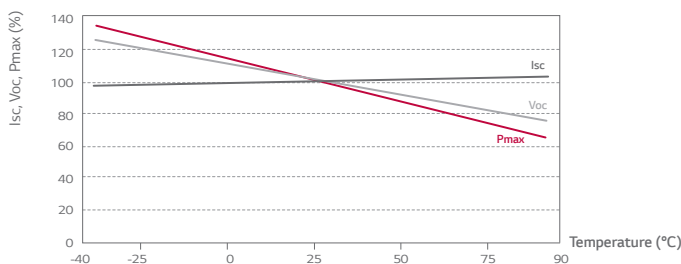
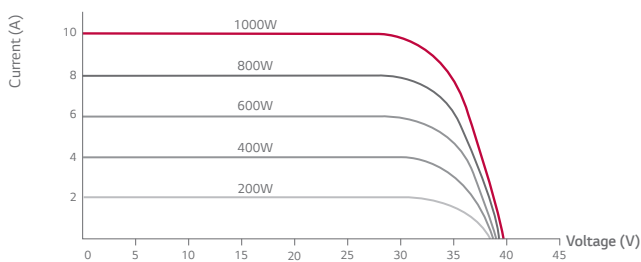
|  |                                      |
|--|--------------------------------------|
| Certifications (In Progress)                         | IEC 61215, IEC 61730-1/-2            |
|  | ISO 9001, IEC 62716 (Ammonia Test)   |
|  | IEC 61701 (Salt Mist Corrosion Test) |
| Module Fire Performance                              | Class C                              |
| Product Warranty                                     | 12 Years                             |
| Output Warranty of Pmax (Measurement Tolerance ± 3%) | 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 | -0.42 %/°C |
| Voc  | -0.30 %/°C |
| Isc  | 0.03 %/°C  |

## Characteristic Curves



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

|                                | 290 W     | 285 W | 280 W |
|--------------------------------|-----------|-------|-------|
| MPP Voltage Vmpp (V)           | 32.0      | 31.8  | 31.6  |
| MPP Current Imp (A)            | 9.09      | 8.99  | 8.89  |
| Open Circuit Voltage Voc (V)   | 38.9      | 38.7  | 38.5  |
| Short Circuit Current Isc (A)  | 9.64      | 9.53  | 9.42  |
| Module Efficiency (%)          | 17.7      | 17.4  | 17.1  |
| Operating Temperature (°C)     | -40 ~ +90 |       |       |
| Maximum System Voltage (V)     | 1000      |       |       |
| Maximum Series Fuse Rating (A) | 20        |       |       |
| Power Tolerance (%)            | 0 ~ +3    |       |       |

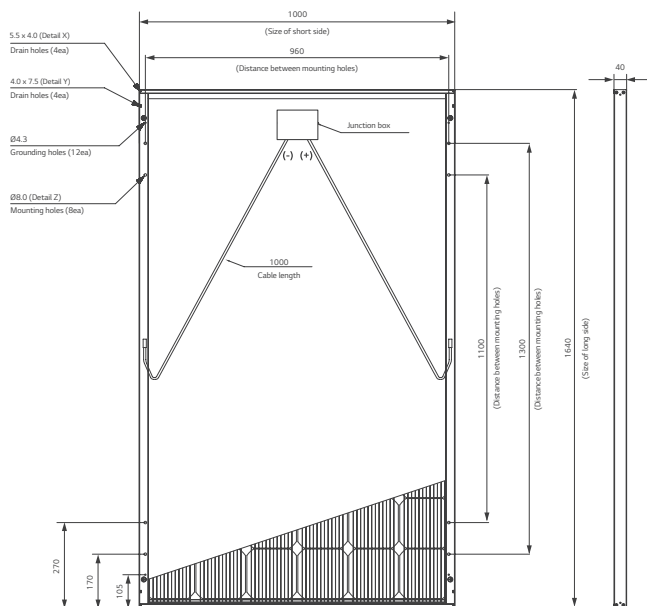
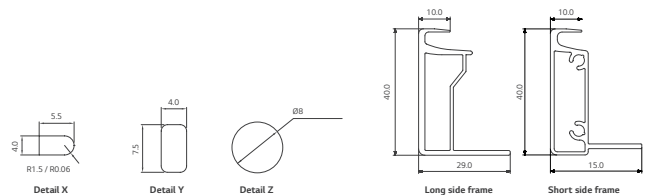
<sup>2</sup> STC (Standard Test Condition): Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM 1.5. The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion. The typical change in module efficiency at 200 W/m<sup>2</sup> in relation to 1000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

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

|                               | 290 W | 285 W | 280 W |
|-------------------------------|-------|-------|-------|
| Maximum Power Pmax (W)        | 212   | 208   | 204   |
| MPP Voltage Vmpp (V)          | 29.2  | 29.0  | 28.8  |
| MPP Current Imp (A)           | 7.24  | 7.16  | 7.08  |
| Open Circuit Voltage Voc (V)  | 35.8  | 35.7  | 35.5  |
| Short Circuit Current Isc (A) | 7.76  | 7.67  | 7.58  |

<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)



The distance between the center of the mounting/grounding holes

