

# Innovation for a Better Life







# 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  $X^{\odot}$  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.



# **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.



# Reduced LID (LiLY Technology)

LG Mono  $X^{\otimes}$  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.



## **Aesthetic Roof**

LG Mono  $X^{\otimes}$  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  $X^{\otimes}$  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  $X^{\otimes}$  Plus is carefully designed to benefit installers by allowing quick installation with a weight of just 17kg and better grips.

#### About LG Electronics





# **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**

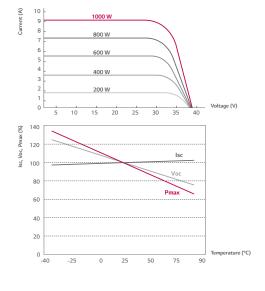
| Certifications                | IEC 61215, IEC 61730-1/-2            |
|-------------------------------|--------------------------------------|
|                               | IEC 62716 (Ammonia Test)             |
|                               | IEC 61701 (Salt Mist Corrosion Test) |
|                               | 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* 🜞                   |
|                               |                                      |

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

#### **Temperature Characteristics**

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

# **Characteristic Curves**



# **Electrical Properties (STC \*)**

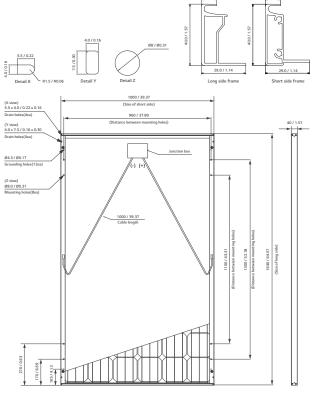
| Module Type                    | 285 W          |
|--------------------------------|----------------|
| MPP Voltage (Vmpp)             | 32.3           |
| MPP Current (Impp)             | 8.88           |
| Open Circuit Voltage (Voc)     | 39.0           |
| Short Circuit Current (Isc)    | 9.43           |
| Module Efficiency (%)          | 17.4           |
| Operating Temperature (°C)     | -40 ~ +90      |
| Maximum System Voltage (V)     | 1000 (IEC, UL) |
| Maximum Series Fuse Rating (A) | 15             |
| Power Tolerance (%)            | 0 ~ +3         |

# **Electrical Properties (NOCT\*)**

| Module Type                 | 285 W |
|-----------------------------|-------|
| Maximum Power (Pmax)        | 209   |
| MPP Voltage (Vmpp)          | 29.5  |
| MPP Current (Impp)          | 7.08  |
| Open Circuit Voltage (Voc)  | 36.1  |
| Short Circuit Current (Isc) | 7.56  |

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

# Dimensions (mm/in)



<sup>\*</sup> The distance between the center of the mounting/grounding holes



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Product specifications are subject to change without notice. DS-N2-60-C-Ca-P-EN-50305

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<sup>\*</sup> 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  $200 \, \text{W/m}^2$  in relation to  $1000 \, \text{W/m}^2$  is -4.5%.