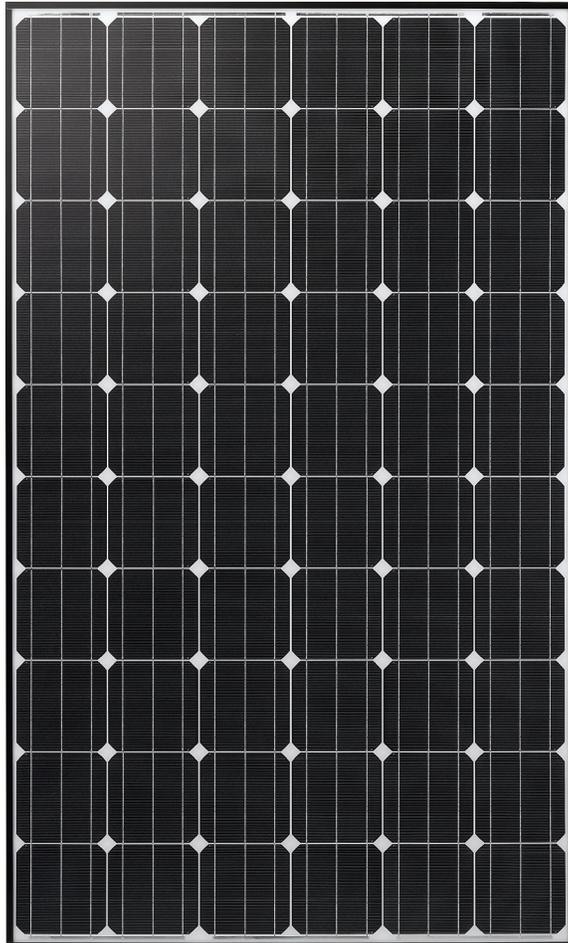


LG Mono  [®] Plus



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Ultra Stable Physical Durability

LG Mono X[®] Plus modules are designed to endure a pressure load of 100 lb which is equivalent to a pile of snow higher than 1.8 meters (weighing more than 1920 lb). In order to ensure durability against wind load, the rear of LG Mono X[®] Plus frame is also designed to endure a pressure of 100 lb, which is equivalent to a wind speed of 208 mph.

1920 lb SNOW (Front)

100 lb

208 mph WIND (Back)

Improved Frame Design

- Improved Adhesion
- Improved Operation
- For Panel Claw

40mm

Feel

- Black Cell Color
- Glossy Piano Black Frame

Finish

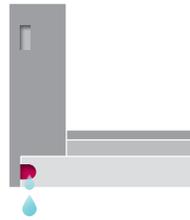
- Soft & Safe Edges
- Cable Clip

Fit

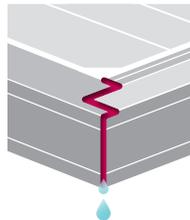
- Black Screw Matched Color with Frame
- Accurate Assembling between Short and Long Frames

Finer Water Drain Design

LG Mono X[®] Plus modules have 4 capillary drains placed in every corner on the front side, liquid sliding design between front glass and frame, and 12 drain holes on the rear side.



12 Drain Holes



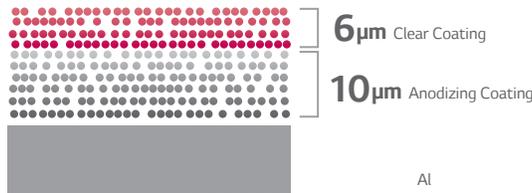
Capillary Drains



Sliding Design

Durable Anodized Aluminium Frame

All frames of LG Mono X[®] Plus are anodized to lengthen the life cycle of modules by forming thick and dense oxide (SiO₂) that may help protect modules from electrochemically detrimental factors.



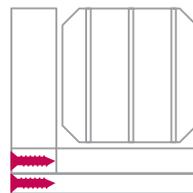
LG Mono X[®] Plus



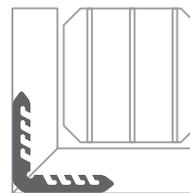
Conventional

Frame Binding with Screw

Since screws are used in the assembly of all LG Mono X[®] Plus frames, modules are exposed to a much lower risk of physical distortion caused by external forces. The majority of our competitors, however, use the corner-key type (without screws) that leaves them in a far more vulnerable position when facing future distortion from external pressures.



Screw Type
(LG Mono X[®] Plus)

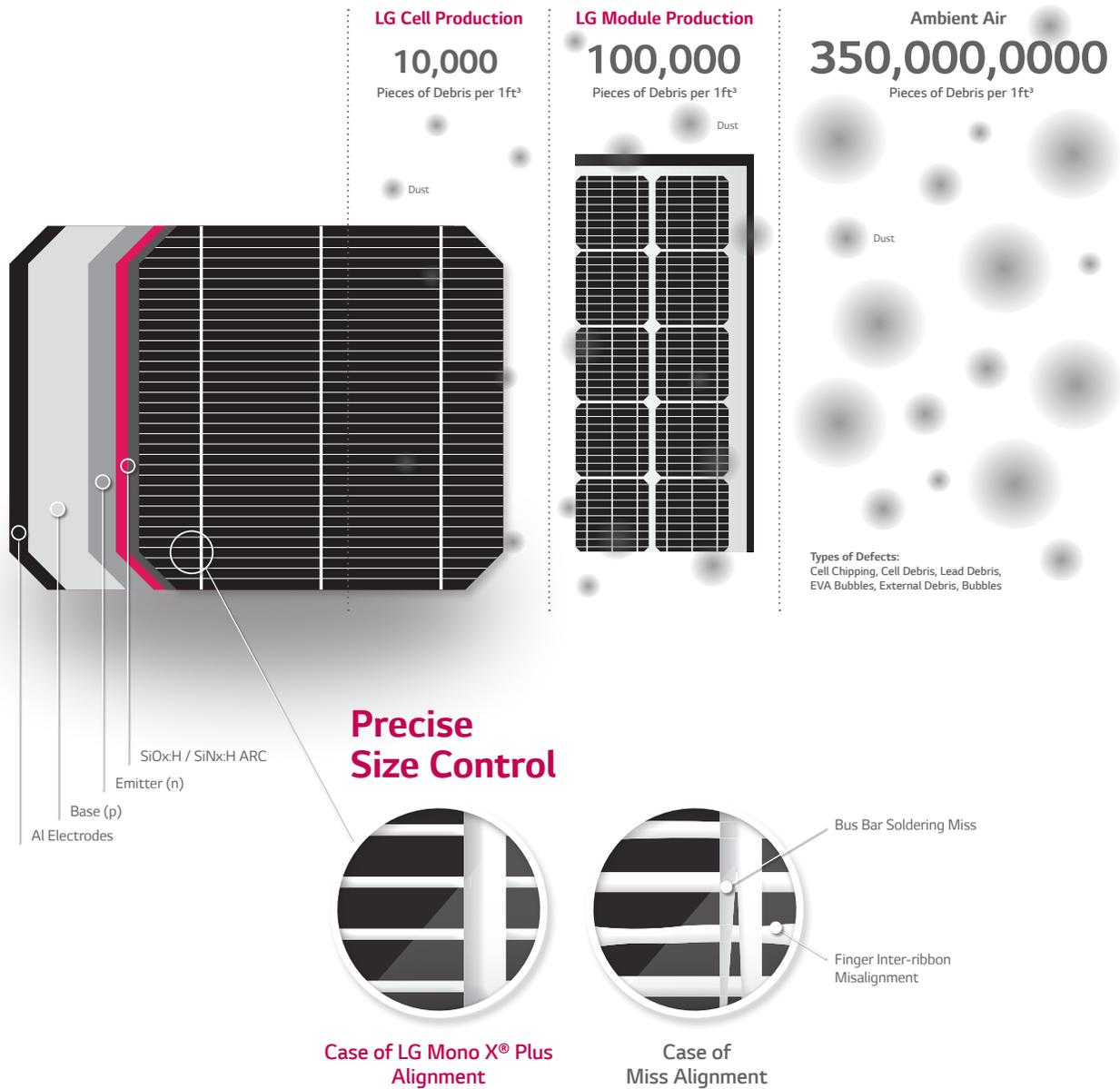


Corner-Key Type
(Conventional)

Lower Dust Level Manufacturing Environment

The LG Solar production site achieved Class 10,000: This is close to lower dust environment and can only be achieved when a dimension of 1ft³ contains less than 10,000 pieces of debris.

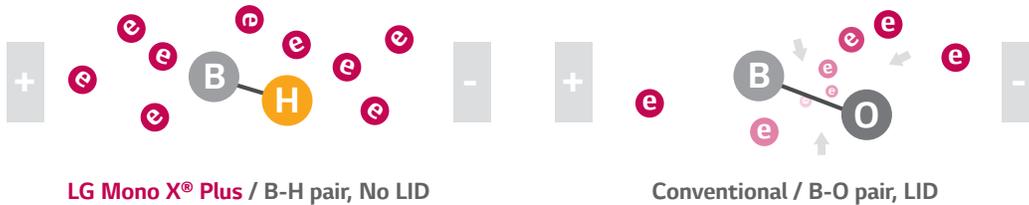
LG internal measurement



LiLY Technology: Reduced LID Cells

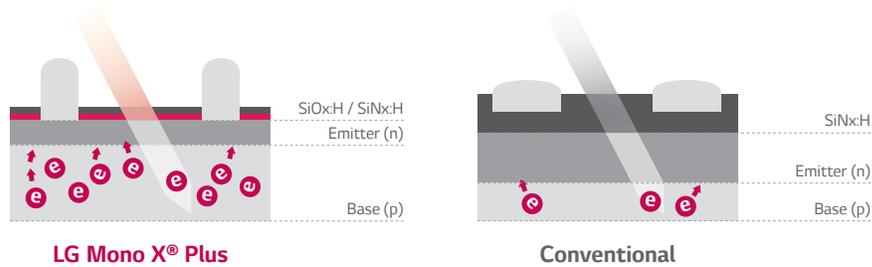
LG Mono X[®] Plus has improved the initial degradation by applying LG's new LiLY(LID*-improvement for Lifetime Yield) Technology, which controls formation of Boron-Oxygen pair, the key factor of LID*.

* LID: Light Induced Degradation



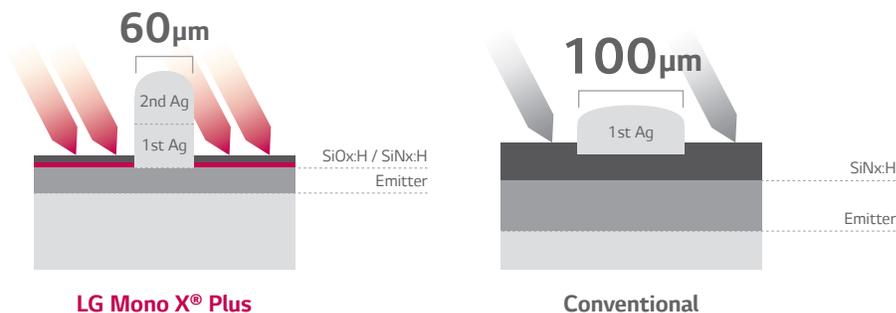
High Quality Shallow Emitter

The shallow emitter structure can increase electron generation area (p-type base). The shallow emitter with low doping density and a new paste for the front side will improve cell efficiency.



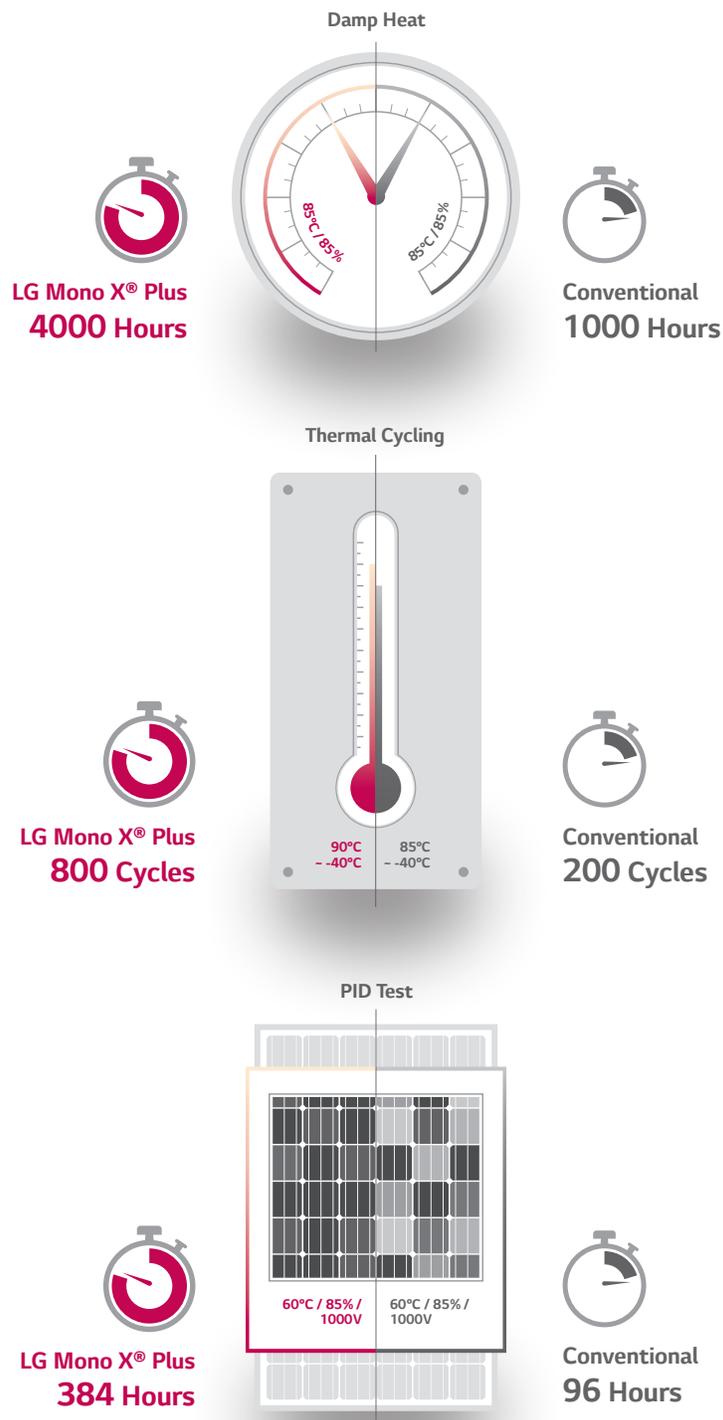
Narrow and Thick Electrode Skyscraper Patterning

LG's technology enables the widths of a cell's finger to remain as narrow as possible as electrodes are stacked vertically. Wider light-absorbing area can be realized without significant area loss; therefore, customers can acquire maximized currents for electricity generation without the slightest reduction in electrode resistance.



Reliability Test Comparison

LG has carried out reliability tests at the development stage that is 4 times as strict as International Standards.



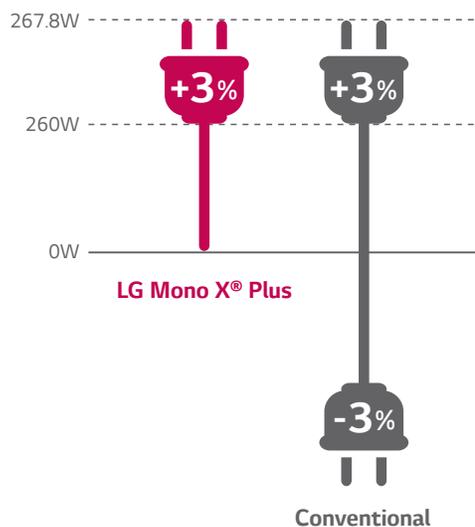
Stringent Environmental Tests

LG Solar PV modules undergo extremely harsh durability testing. During a lifecycle of a PV module, it could face a wide variety of unforeseeable events that may threaten the longevity of the product. One of the main concerns for clients is a module's physical durability.



Positive Power Tolerance

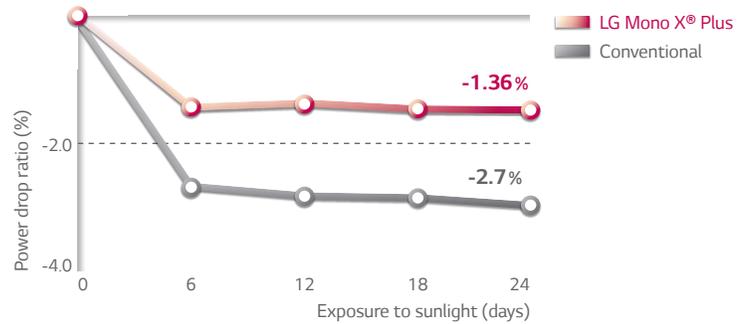
LG Mono X[®] Plus is guaranteed to always provide higher power output than the level that is printed on its datasheets ("positive tolerance only" policy). Module power outputs of competitors have a \pm tolerance range in their power output.



Low Power Drop Ratio

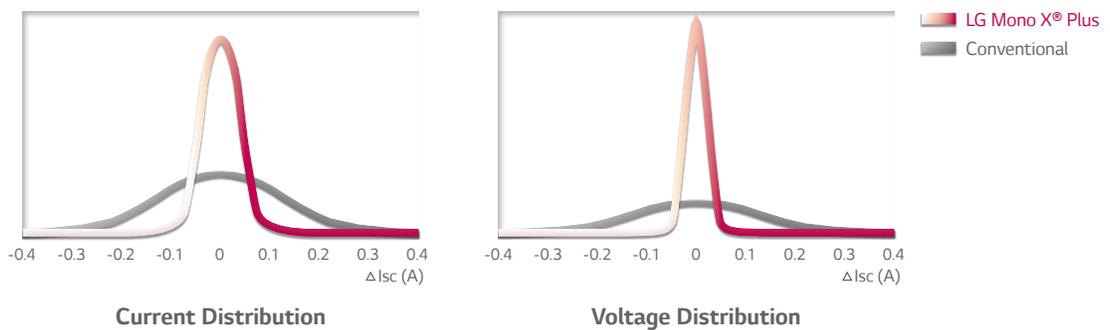
P-type LG Mono X[®] Plus reduces initial output decrease with LG's own LID* improvement technology.

* LID: Light Induced Degradation



Extremely Low Mismatching Loss

Low mismatching loss is one of the benefit of modules with uniform electrical performance. When installing the solar power system, differences in electrical properties among solar modules can reduce the capability of power generation of the system. LG Mono X[®] Plus could achieve extremely low mismatching loss due to narrow distribution of current and voltage in production.



LG Solar USA

North American Solar Business Team

LG Electronics USA, Inc.

1000 Sylvan Avenue Englewood Cliffs, NJ 07632

www.lgsolarusa.com

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