

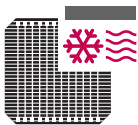
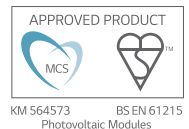


## LG NeON<sup>®</sup> 2 *Black ACe*

LG320E1K-A5

60 cell

The LG NeON<sup>®</sup> 2 *Black ACe* is embedded AC module, which combines LG NeON<sup>®</sup> 2 *Black* high power DC module and Enphase Micro inverter IQ6+. As they are combined, LG NeON<sup>®</sup> 2 *Black ACe* can simplify all the processes such as logistics, installation, and monitoring.



### Enhanced Long-term Reliability

The LG NeON<sup>®</sup> 2 *Black ACe* has a 15 mm distance between the DC module and the Microinverter. The distance mitigates any impact to performance and reliability by allowing sufficient air-flow for cooling.



### High Power Output

The LG NeON<sup>®</sup> 2 series modules are proven to produce high energy output from high-efficiency n-type cells enabling more flexible use of available roof space.



### Safer Solar Roof System

The LG NeON<sup>®</sup> 2 *Black ACe* produces safe AC voltage and complies with NEC 2014 and 2017 standards.



### User Friendly Monitoring

Remote Monitoring and Management with Enphase Enlighten software, the LG NeON<sup>®</sup> 2 *Black ACe* is easy to monitor and manage from any web connected device.



### Simplified Logistics

The LG NeON<sup>®</sup> 2 *Black ACe* simplifies logistics by consolidating multiple PV system components into a single product SKU. Making it easier to order, store, and transport.



### Quick Installation

Installation of the LG NeON<sup>®</sup> 2 *Black ACe* is a two step process of lifting the inverter and connecting the cable without the need to install the inverter, reducing installation labor.

#### About LG Electronics

LG Electronics is a global player who has been committed to expanding its capacity, based on solar energy business as its future growth engine. We embarked on a solar energy source research program in 1985, supported by LG Group's rich experience in semi-conductor, LCD, chemistry, and materials industry. We successfully released first Mono X<sup>®</sup> series to the market in 2010, which were exported to 32 countries in the following 2 years, thereafter. In 2013, NeON<sup>™</sup> (previously known as Mono X<sup>®</sup> NeON) & 2015 NeON2 with CELLO technology won "Intersolar Award", which proved LG is the leader of innovation in the industry.

## Mechanical Properties

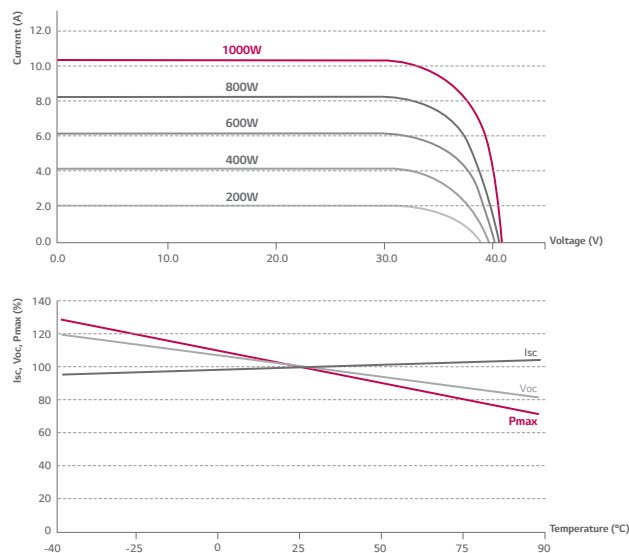
|                                      |                                               |
|--------------------------------------|-----------------------------------------------|
| Cells                                | 6 x 10                                        |
| Cell Vendor                          | LG                                            |
| Cell Type                            | Monocrystalline / N-type                      |
| Cell Dimensions                      | 161.7 x 161.7 mm / 6 inches                   |
| # of Busbar                          | 12 (Multi Wire Busbar)                        |
| Dimensions (L x W x H)               | 1686 x 1016 x 40 mm<br>66.38 x 40 x 1.57 inch |
| Weight                               | 19.0 kg / 41.88 lb                            |
| Front Load                           | 6000 Pa                                       |
| Rear Load                            | 5400 Pa                                       |
| Cooling                              | Natural convection - No fans                  |
| Enclosure Environmental Rating       | Outdoor - NEMA 250 type 6 (MIC)               |
| Operating Ambient Temperature        | -40 ~ +65 °C (-40 ~ +149°F)                   |
| Storage Temperature                  | -40 ~ +85 °C (-40 ~ +185°F)                   |
| Glass                                | High Transmission Tempered Glass              |
| Frame                                | Anodized Aluminum                             |
| Inverter Model (Utility Interactive) | Enphase IQ6+ Microinverter                    |

## Certifications and Warranty

|                                                                  |                |                                        |
|------------------------------------------------------------------|----------------|----------------------------------------|
| Certifications                                                   | AC Module      | UL 1741, UL 1703                       |
|                                                                  | Micro Inverter | UL 1741 / IEEE 1547, UL 62109-1        |
|                                                                  |                | FCC Part 15 Class B, ICES-0003 Class B |
|                                                                  |                | CAN/CSA-C22.2 NO. 107.1-01             |
| Module Fire Performance                                          |                | Type 2 (UL 1703)                       |
| Solar Module Product Warranty                                    |                | 12 years                               |
| Micro Inverter Warranty                                          |                | 25 years                               |
| Output Warranty of Pmax (DC)<br>(Measurement Tolerance $\pm$ 3%) |                | Linear Warranty*                       |

\* 1) 1st year: 98%. 2) After 1st year: 0.55% annual degradation. 3) 25 years: 84.8%

## Characteristic Curves



## DC Temperature Characteristics

|       |            |
|-------|------------|
| NOCT* | 45 ± 3 °C  |
| Pmpp  | -0.37 %/°C |
| Voc   | -0.27 %/°C |
| Isc   | 0.03 %/°C  |

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

### DC Electrical Properties (STC\*)

|                       |        |
|-----------------------|--------|
| Module                | 320 W  |
| Maximum Power (Pmax)* | 320    |
| Module Efficiency (%) | 18.7   |
| Power Tolerance (%)   | 0 ~ +3 |

\* The typical change in module efficiency at 200 W/m<sup>2</sup> in relation to 1000 W/m<sup>2</sup> is -2.0%.

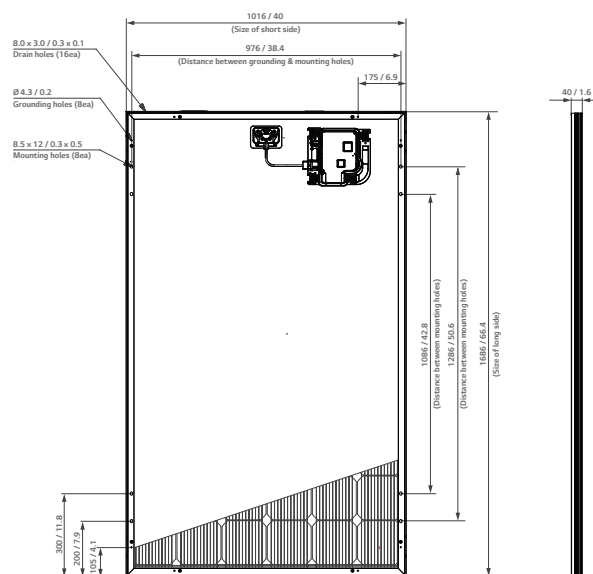
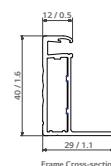
\* STC (Standard Test Condition): Irradiance 1,000 W/m<sup>2</sup>, Ambient Temperature 25 °C, AM 1.5

\* The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion.

## AC Electrical Properties

|                                                    |                             |
|----------------------------------------------------|-----------------------------|
| <b>Peak Output Power (VA)</b>                      | 290                         |
| <b>Max. Continuous Output Power (VA)</b>           | 280                         |
| <b>Nominal Voltage / Range (V)</b>                 | 240 / 211 ~ 264             |
| <b>Nominal Output Current (A)</b>                  | 1.17                        |
| <b>Nominal Frequency / Range (Hz)</b>              | 60.0 / 59.3 ~ 60.5          |
| <b>Power Factor / Adjustable</b>                   | 1/0.7 leading...0.7 lagging |
| <b>CEC Weighted Efficiency (%)</b>                 | 97.0                        |
| <b>Max. Branch Circuit Over Current Protection</b> | 20                          |
| <b>Number of Max. AC Modules (EA)</b>              | 13                          |

### Dimensions (mm/in)



\* The distance between the center of the mounting/grounding holes.



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Innovation for a Better Life

