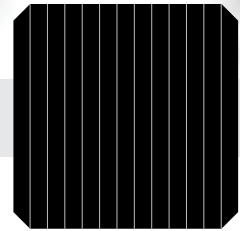


# LG NeON<sup>®</sup> 2

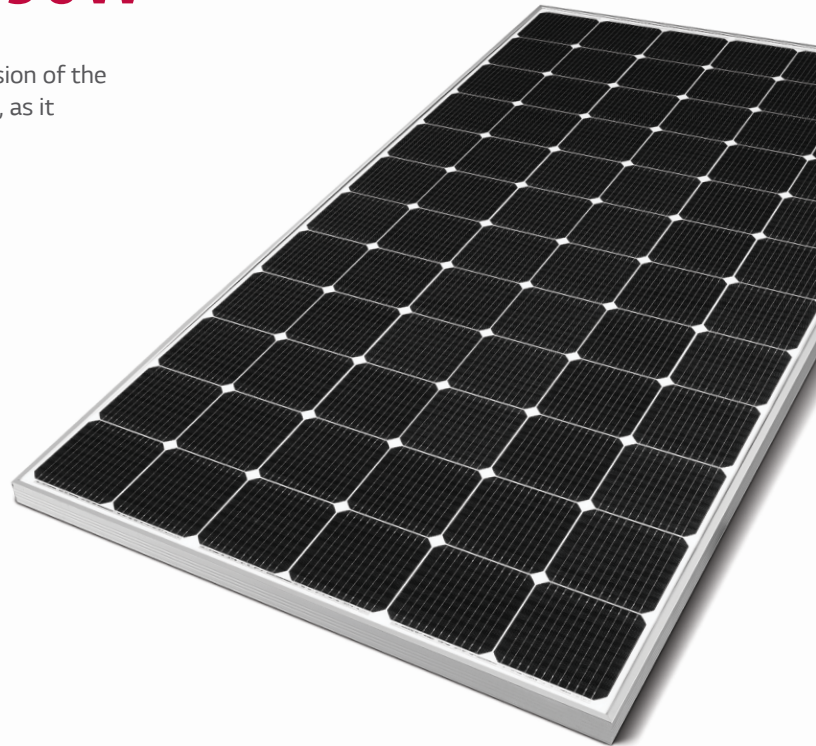
LG405N2W-A5 | LG400N2W-A5 | LG395N2W-A5 | LG390N2W-A5



72

## 405W | 400W | 395W | 390W

The LG NeON<sup>®</sup> 2 is LG's best-selling solar module. The 72cell-version of the NeON<sup>®</sup> 2 is especially suited for commercial or utility applications, as it makes space management easier while maximizing power.



### Feature



#### Enhanced Performance Warranty

LG NeON<sup>®</sup> 2 has an enhanced performance warranty. The annual degradation has fallen from -0.6%/yr to -0.5%/yr. Even after 25 years, the cell guarantees 2.4% more output than the previous LG NeON<sup>®</sup> 2 modules.



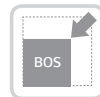
#### High Power Output

Compared with previous models, the LG NeON<sup>®</sup> 2 72 cell has been designed to significantly enhance its output efficiency, thereby making it efficient even in limited space.



#### Roof Aesthetics

LG NeON<sup>®</sup> 2 has been designed with aesthetics in mind, using thinner wires that appear all black at a distance.



#### Outstanding Durability

LG has extended the warranty of the LG NeON<sup>®</sup> 2 from 15 years to 25 years, including labor. In addition, LG NeON<sup>®</sup> 2 can endure a front load up to 5400 Pa, and a rear load up to 4300 Pa.



#### Improved Performance on Sunny Days

LG NeON<sup>®</sup> 2 now performs better on sunny days, thanks to its improved temperature coefficient.



#### Near Zero LID (Light Induced Degradation)

The n-type cells used in LG NeON<sup>®</sup> 2 have almost no boron. This leads to less LID (Light Induced Degradation) right after 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. The NeON<sup>®</sup> (previous MonoX<sup>®</sup> NeON), NeON<sup>®</sup>2, NeON<sup>®</sup>2 BiFacial won the "Intersolar AWARD" in 2013, 2015 and 2016, which demonstrates LG Solar's lead, innovation and commitment to the industry.



## Mechanical Properties

|                        |                                   |
|------------------------|-----------------------------------|
| Cells                  | 6 x 12                            |
| 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) | 2,024 x 1,024 x 40 mm             |
|                        | 79.69 x 40.31 x 1.57 in           |
| Front Load             | 5,400 Pa / 113 psf*               |
| Rear Load              | 4,300 Pa / 90 psf*                |
| Weight                 | 21.7 kg / 47.84 lb                |
| Connector Type         | MC4 (MC)                          |
| Junction Box           | IP68 with 3 Bypass Diodes         |
| Cables                 | 1,200 mm x 2 ea / 47.24 in x 2 ea |
| Glass                  | Tempered Glass with AR Coating    |
| Frame                  | Anodized Aluminium                |

\* Please refer to the installation manual for the details.

## Certifications and Warranty

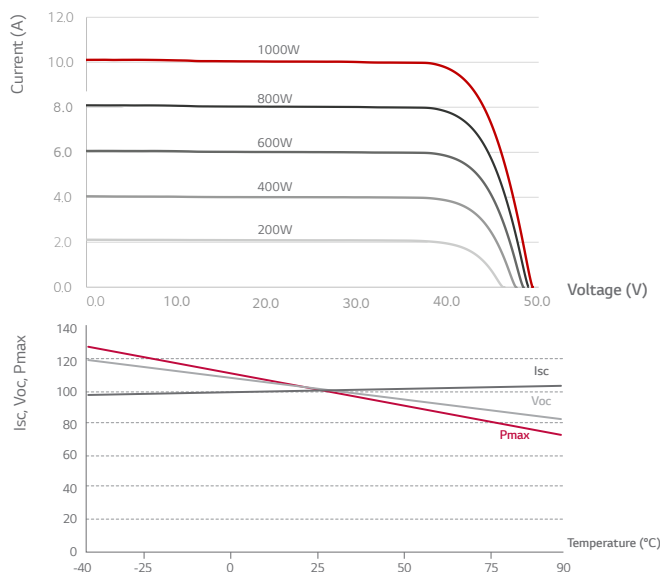
|                         |                                      |
|-------------------------|--------------------------------------|
| Certifications          | IEC 61215, IEC 61730-1/-2            |
|                         | UL 1703                              |
|                         | IEC 61701 (Salt mist corrosion test) |
|                         | IEC 62716 (Ammonia corrosion test)   |
|                         | ISO 9001                             |
| Module Fire Performance | Type 1 (UL 1703)                     |
| Fire Rating             | Class C (ULC/ORD C 1703, IEC 61730)  |
| Product Warranty        | 25 Years                             |
| Output Warranty of Pmax | Linear Warranty*                     |

\* 1) 1st year : 98%, 2) after 1st year : 0.5%p annual degradation, 3) 86% for 25 years

## Temperature Characteristics

|      |        |        |
|------|--------|--------|
| NOCT | [ °C ] | 45 ± 3 |
| Pmax | [%/°C] | -0.36  |
| Voc  | [%/°C] | -0.26  |
| Isc  | [%/°C] | 0.02   |

## Characteristic Curves



### Electrical Properties (STC\*)

| Model                       |      | LG405N2W-A5            | LG400N2W-A5 | LG395N2W-A5 | LG390N2W-A5 |
|-----------------------------|------|------------------------|-------------|-------------|-------------|
| Maximum Power (Pmax)        | [W]  | 405                    | 400         | 395         | 390         |
| MPP Voltage (Vmpp)          | [V]  | 41.0                   | 40.6        | 40.2        | 39.8        |
| MPP Current (Impp)          | [A]  | 9.89                   | 9.86        | 9.83        | 9.81        |
| Open Circuit Voltage (Voc)  | [V]  | 49.4                   | 49.3        | 49.2        | 49.1        |
| Short Circuit Current (Isc) | [A]  | 10.51                  | 10.47       | 10.43       | 10.39       |
| Module Efficiency           | [%]  | 19.5                   | 19.3        | 19.1        | 18.8        |
| Operating Temperature       | [°C] | -40 ~ +90              |             |             |             |
| Maximum System Voltage      | [V]  | 1000 (IEC) / 1500 (UL) |             |             |             |
| Maximum Series Fuse Rating  | [A]  | 20                     |             |             |             |
| Power Tolerance             | [%]  | 0 ~ +3                 |             |             |             |

\* STC (Standard Test Condition): Irradiance 1000 W/m<sup>2</sup>, cell temperature 25 °C, AM 1.5

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

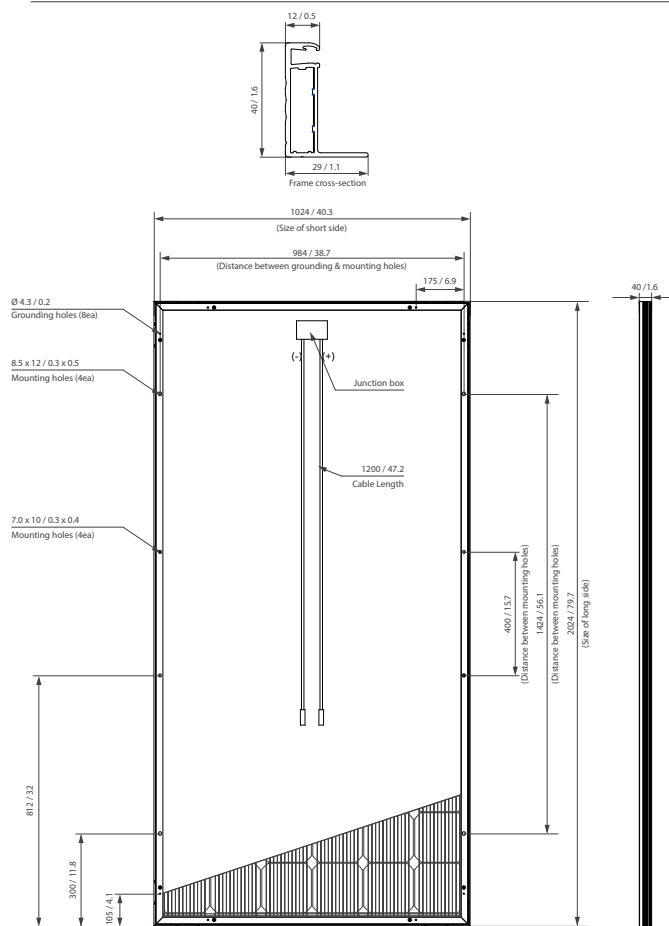
The Typical change in module efficiency at 200 W/m<sup>2</sup> in relation to 1000 W/m<sup>2</sup> is -2.0%.

### Electrical Properties (NOCT\*)

| Model                       |     | LG40S1ZW-A5 | LG400N1ZW-A5 | LG39S1ZW-A5 | LG390N1ZW-A5 |
|-----------------------------|-----|-------------|--------------|-------------|--------------|
| Maximum Power (Pmax)        | [W] | 300         | 296          | 293         | 289          |
| MPP Voltage (Vmpp)          | [V] | 38.0        | 37.6         | 37.2        | 36.9         |
| MPP Current (Impp)          | [A] | 7.91        | 7.88         | 7.86        | 7.84         |
| Open Circuit Voltage (Voc)  | [V] | 46.2        | 46.1         | 46.0        | 45.9         |
| Short Circuit Current (Isc) | [A] | 8.44        | 8.41         | 8.38        | 8.35         |

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

**Dimensions (mm / inch)**



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

