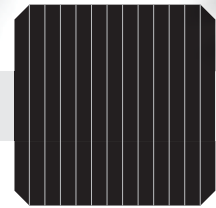


# LG NeON<sup>®</sup> 2 BiFacial

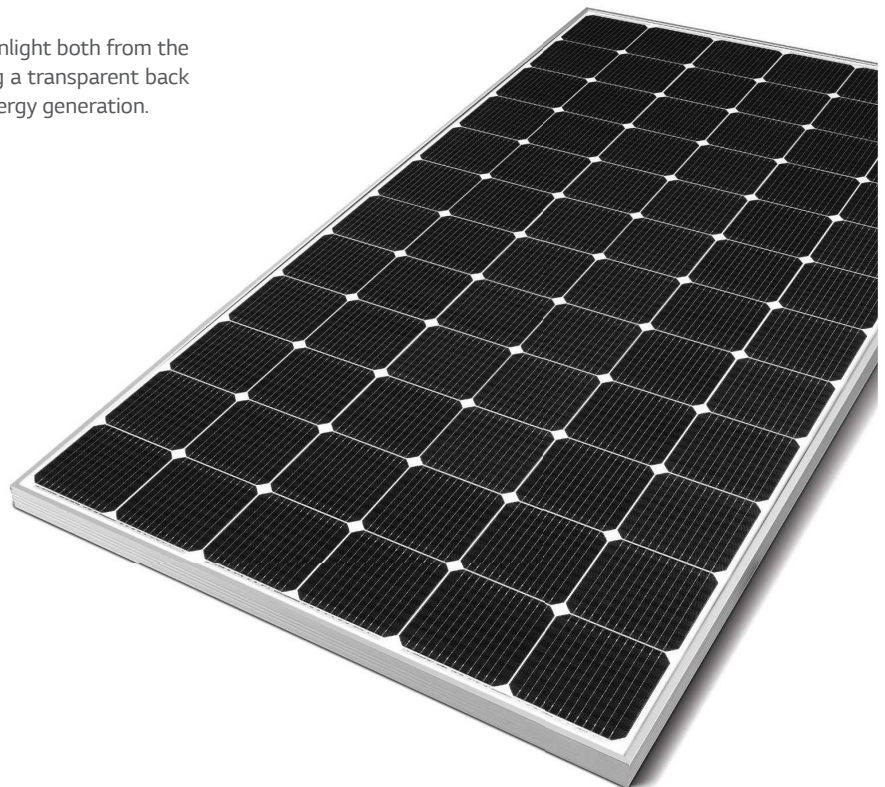
LG410N2T-V5 | LG405N2T-V5 | LG400N2T-V5



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## 410W | 405W | 400W

The LG NeON<sup>®</sup> 2 BiFacial is designed to absorb sunlight both from the front and the rear sides of its NeON<sup>®</sup> cell by using a transparent back sheet. The dual faces of the cell result in higher energy generation.



## Features



### More Generation on Cloudy Days

LG NeON<sup>®</sup> 2 BiFacial gives good performance even on a cloudy day due to its low energy reduction in weak sunlight.



### Increased Energy Yield

LG NeON<sup>®</sup> 2 BiFacial modules use highly efficient bifacial solar cell, "NeON" applied Cello technology. Through the Cello technology, LG NeON<sup>®</sup> 2 BiFacial can achieve up to 30% more energy than standard PV module.



### Better Performance on Sunny Days

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



### Enhanced Product Warranty

LG provides the product warranty of the LG NeON<sup>®</sup> 2 BiFacial to an industry-leading 25 years.

# LG NeON<sup>®</sup>2 BiFacial

Preliminary

LG410N2T-V5 | LG405N2T-V5 | LG400N2T-V5

## General Data

|                                   |   |
|-----------------------------------|---|
| Cell Properties (Material / Type) | Monocrystalline / N-type                |
| Cell Maker                        | LG                                      |
| Cell Configuration                | 72 Cells (6 x 12)                       |
| Number of Busbar                  | 12 EA                                   |
| Module Dimensions (L x W x H)     | 2,024 mm x 1,024 mm x 40 mm             |
| Weight                            | 20.3 kg                                 |
| Glass (Thickness / Material)      | 2.8 mm / Tempered Glass with AR coating |
| Backsheet (Color)                 | Transparent                             |
| Frame (Material)                  | Anodized Aluminium                      |
| Junction Box (Protection Degree)  | IP68 with 3 Bypass Diodes               |
| Cables (Length)                   | 1,200 mm x 2 EA                         |
| Connector (Type / Maker)          | MC4 / MC                                |

## Temperature Characteristics

|       |        |        |
|-------|--------|--------|
| NMOT* | [ °C ] | 42 ± 3 |
| Pmax  | [%/°C] | -0.36  |
| Voc   | [%/°C] | -0.27  |
| Isc   | [%/°C] | 0.03   |

\* NMOT (Nominal Module Operating Temperature): Irradiance 800 W/m<sup>2</sup>, Ambient temperature 20 °C, Wind speed 1 m/s, Spectrum AM 1.5

## Electrical Properties

| Model                            |     | LG410N2T-V5 |          |          | LG405N2T-V5 |          |          | LG400N2T-V5 |          |          |
|----------------------------------|-----|-------------|----------|----------|-------------|----------|----------|-------------|----------|----------|
|                                  |     | STC         | BIF100** | BIF200** | STC         | BIF100** | BIF200** | STC         | BIF100** | BIF200** |
| Maximum Power (Pmax)             | [W] | 410         | 435      | 460      | 405         | 430      | 455      | 400         | 425      | 450      |
| MPP Voltage (Vmpp)               | [V] | 42.3        | 42.3     | 42.3     | 41.9        | 41.9     | 41.9     | 41.5        | 41.5     | 41.5     |
| MPP Current (Impp)               | [A] | 9.71        | 10.28    | 10.87    | 9.68        | 10.26    | 10.86    | 9.65        | 10.24    | 10.84    |
| Open Circuit Voltage (Voc, ±5%)  | [V] | 49.9        | 49.9     | 49.9     | 49.8        | 49.8     | 49.8     | 49.7        | 49.7     | 49.7     |
| Short Circuit Current (Isc, ±5%) | [A] | 10.30       | 10.91    | 11.54    | 10.26       | 10.88    | 11.51    | 10.22       | 10.85    | 11.48    |
| Module Efficiency                | [%] | 19.8        | 21.0     | 22.2     | 19.5        | 20.7     | 22.0     | 19.3        | 20.5     | 21.7     |
| Pmax Bifaciality Coefficient     | [%] |             |          |          | 70 ± 5      |          |          |             |          |          |
| Power Tolerance                  | [%] |             |          |          | 0 ~ +3      |          |          |             |          |          |

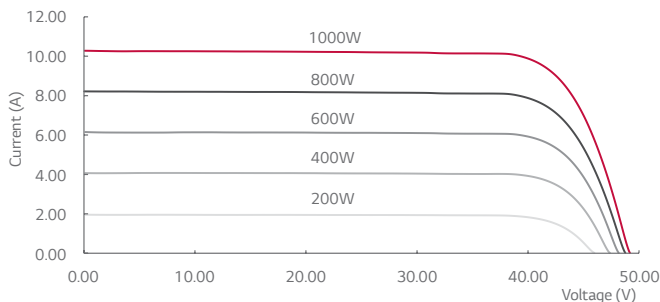
\* STC (Standard Test Condition): Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM 1.5, Measure Tolerance: ±3%

\*\* The electrical properties of BIF100 and BIF200 measure under the front side irradiance 1000W/m<sup>2</sup> + (100W/m<sup>2</sup> or 200W/m<sup>2</sup>) \* BIF1. Use 100W/m<sup>2</sup> for BIF100 and 200W/m<sup>2</sup> for BIF200.

## Electrical Properties (NMOT)

| Model                       |     | LG410N2T-V5 |        |        | LG405N2T-V5 |        |        | LG400N2T-V5 |        |        |
|-----------------------------|-----|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|
|                             |     | STC         | BIF100 | BIF200 | STC         | BIF100 | BIF200 | STC         | BIF100 | BIF200 |
| Maximum Power (Pmax)        | [W] | 308         | 326    | 345    | 304         | 322    | 341    | 300         | 318    | 337    |
| MPP Voltage (Vmpp)          | [V] | 39.8        | 39.8   | 39.8   | 39.4        | 39.4   | 39.4   | 39.0        | 39.0   | 39.0   |
| MPP Current (Impp)          | [A] | 7.74        | 8.20   | 8.67   | 7.72        | 8.18   | 8.66   | 7.69        | 8.16   | 8.65   |
| Open Circuit Voltage (Voc)  | [V] | 47.1        | 47.1   | 47.1   | 47.0        | 47.0   | 47.0   | 46.9        | 46.9   | 46.9   |
| Short Circuit Current (Isc) | [A] | 8.28        | 8.77   | 9.28   | 8.25        | 8.75   | 9.25   | 8.22        | 8.72   | 9.23   |

## I-V Curves



## Certifications and Warranty

|                          |   |
|--------------------------|---|
| Certifications           | IEC 61215-1/-1-1 / 2:2016 <sup>1)</sup> ,<br>IEC 61730-1/2:2016 <sup>1)</sup> , UL 1703 <sup>1)</sup> |
|                          | ISO 9001, ISO 14001, ISO 50001  |
|                          | OHSAS 18001   |
| Salt Mist Corrosion Test | IEC 61701:2012 Severity 6 <sup>1)</sup>   |
| Ammonia Corrosion Test   | IEC 62716:2013 <sup>1)</sup>  |
| Module Fire Performance  | Type 1 (UL 1703) <sup>1)</sup>  |
| Fire Rating              | Class C (UL 790) <sup>1)</sup>  |
| Product Warranty         | 25 Years  |
| Output Warranty of Pmax  | Linear Warranty*  |

1) In progress

\* TBD

## Operating Conditions

|                              |            |                          |
|------------------------------|------------|--------------------------|
| Operating Temperature        | [°C]       | -40 ~ +90                |
| Maximum System Voltage       | [V]        | 1,000 (IEC) / 1,500 (UL) |
| Maximum Series Fuse Rating   | [A]        | 20                       |
| Mechanical Test Load (Front) | [Pa / psf] | 5,400 / 113              |
| Mechanical Test Load (Rear)  | [Pa / psf] | 3,000 / 63               |

\* Test Load = Design Load x Safety Factor (1.5)

## Packaging Configuration

|   |      |                       |
|---|------|-----------------------|
| Number of Modules Per Pallet            | [EA] | 25                    |
| Number of Modules Per 40ft HQ Container | [EA] | 550                   |
| Packaging Box Dimensions (L x W x H)    | [mm] | 2,080 x 1,120 x 1,226 |
| Packaging Box Gross Weight              | [kg] | 551                   |

## Dimensions (mm / inch)

