LG NeON®2 BiFacial

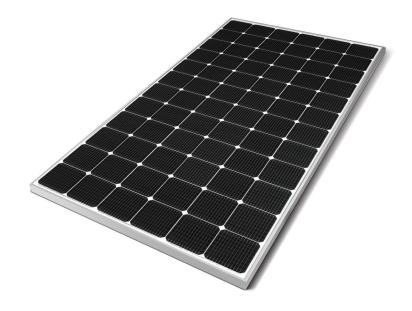
LG425N2T-V5 | LG430N2T-V5 | LG435N2T-V5

425W | 430W | 435W

The LG NeON[®] 2 BiFacial is designed to absorb sunlight both from the front and the rear sides of its NeON[®] cell by using a transparent backsheet. The dual faces of the cell result in higher energy generation.







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Features



Enhanced Product Warranty

LG provides the product warranty of the LG NeON[®] 2 BiFacial to an industry-leading 25 years.



Bifacial Energy Yield

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



Better Performance on a Sunny Day

LG NeON[®] 2 BiFacial now performs better on sunny days, thanks to its improved temperature coefficient.



More Generation on a Cloudy Day

LG NeON[®] 2 BiFacial gives good performance even on a cloudy day due to its low energy reduction in weak sunlight.

When you go solar, ask for the brand you can trust: LG Solar

About LG Electronics

LG Electronics is a global leader in electronic products in the clean energy markets by offering solar PV panels and energy storage systems. 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[®] series to the market, which is now available in 32 countries. The NeON[®] (previous MonoX[®] NeON), NeON[®]2, NeON[®]2 BiFacial won the "Intersolar AWARD" in 2013, 2015 and 2016, which demonstrates LG's leadership and innovation in the solar industry.

LG Solar

LG NeON[®]2 BiFacial

LG425N2T-V5 | LG430N2T-V5 | LG435N2T-V5

General Data

| ochera: Data | |
|----------------------------------|--------------------------------------|
| Cell Properties (Material/Type) | Monocrystalline/N-type |
| Cell Maker | LG |
| Cell Configuration | 72 Cells (6 x 12) |
| Number of Busbars | 12EA |
| Module Dimensions (L x W x H) | 2,024mm x 1,024mm x 40 mm |
| Weight | 20.3 kg |
| Glass (Thickness/Material) | 2.8mm/Tempered Glass with AR Coating |
| Backsheet (Color) | Transparent |
| Frame (Material) | Anodized Aluminium |
| Junction Box (Protection Degree) | IP 68 with 3 Bypass Diodes |
| Cables (Length) | 1,200mm x 2EA |
| Connector (Type/Maker) | MC 4/MC |
| | |

Temperature Characteristics

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

* NMOT (Nominal Module Operating Temperature): Irradiance 800 W/m2, Ambient temperature 20 °C, Wind speed 1 m/s, Spectrum AM 1.5

Electrical Properties

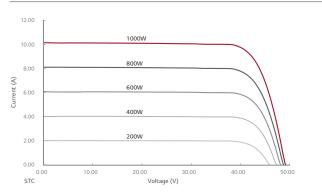
| Madal | | LG425N2T-V5 | | | LG430N2T-V5 | | | LG435N2T-V5 | | |
|------------------------------|-----|-------------|---------------|---------------|-------------|---------|---------|-------------|---------|---------|
| Model | | STC* | BiFi100 ** | BiFi200 ** | STC* | BiFi100 | BiFi200 | STC* | BiFi100 | BiFi200 |
| Maximum Power (Pmax) | [W] | 400 | 425 | 450 | 405 | 430 | 455 | 410 | 435 | 460 |
| MPP Voltage (Vmpp) | [V] | 41.5 | 41.5 | 41.5 | 41.9 | 41.9 | 41.9 | 42.3 | 42.3 | 42.3 |
| MPP Current (Impp) | [A] | 9.65 | 10.24 | 10.84 | 9.68 | 10.26 | 10.86 | 9.71 | 10.28 | 10.87 |
| Open Circuit Voltage (Voc) | [V] | 49.7 | 49.7 | 49.7 | 49.8 | 49.8 | 49.8 | 49.9 | 49.9 | 49.9 |
| Short Circuit Current (Isc) | [A] | 10.22 | 10.85 | 11.48 | 10.26 | 10.88 | 11.51 | 10.30 | 10.91 | 11.54 |
| Module Efficiency | [%] | 19.3 | 20.5 | 21.7 | 19.5 | 20.7 | 22.0 | 19.8 | 21.0 | 22.2 |
| Pmax Bifaciality Coefficient | [%] | 70 ± 5 | | | | | | | | |
| Power Tolerance | [%] | | | | | 0~+3 | | | | |

* STC (Standard Test Condition): Irradiance 1000W/m2, Cell temperature 25°C, AM 1.5, Measure Tolerance: ± 3% ** The electrical properties of BiFi100 and BiFi200 measure under the front side irradiance 1000W/m2 + (100W/m2 or 200W/m2) x BiFi. Use 100W/m2 for BiFi100 and 200W/m2 for BiFi200.

Electrical Properties (NMOT)

| Model | | LG425N2T-V5 | | | LG430N2T-V5 | | | LG435N2T-V5 | | |
|-----------------------------|-----|-------------|---------|---------|-------------|---------|---------|-------------|---------|---------|
| Wodel | | STC | BiFi100 | BiFi200 | STC | BiFi100 | BiFi200 | STC | BiFi100 | BiFi200 |
| Maximum Power (Pmax) | [W] | 300 | 318 | 337 | 304 | 322 | 341 | 308 | 326 | 345 |
| MPP Voltage (Vmpp) | [V] | 39.0 | 39.0 | 39.0 | 39.4 | 39.4 | 39.4 | 39.8 | 39.8 | 39.8 |
| MPP Current (Impp) | [A] | 7.69 | 8.16 | 8.65 | 7.72 | 8.18 | 8.66 | 7.74 | 8.20 | 8.67 |
| Open Circuit Voltage (Voc) | [V] | 46.9 | 46.9 | 46.9 | 47.0 | 47.0 | 47.0 | 47.1 | 47.1 | 47.1 |
| Short Circuit Current (Isc) | [A] | 8.22 | 8.72 | 9.23 | 8.25 | 8.75 | 9.25 | 8.28 | 8.77 | 9.28 |

I-V Curves





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Preliminary

Certifications and Warranty

| | IEC 61215-1/-1-1/2:2016, IEC 61730-1/2:2016, | | | |
|--|--|--|--|--|
| Certifications | UL 1703 | | | |
| | ISO 9001, ISO 14001, ISO 50001 | | | |
| | OHSAS 18001 | | | |
| Salt Mist Corrosion Test | IEC 61701:2012 Severity 6 | | | |
| Ammonia Corrosion Test | IEC 62716:2013 | | | |
| Module Fire Performance | Type 1 (UL 1703) | | | |
| Fire Rating | Class C (UL 790, ULC/ORD C 1703) | | | |
| Solar Module Product Warranty | 25 Years | | | |
| Solar Module Output Warranty | Linear Warranty* | | | |
| Improved: 1st year 98%, from 2-24th year: 0.33%/year down, after 25th year: 90.08% | | | | |

Operating Conditions

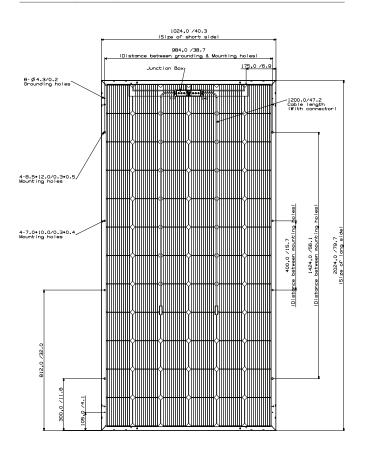
| operating conditions | | |
|---------------------------------------|-----------|---------------------|
| Operating Temperature | [°C] | -40 ~+90 |
| Maximum System Voltage | [V] | 1,000(IEC)/1500(UL) |
| Maximum Series Fuse Rating | [A] | 20 |
| Mechanical Test Load (Front) | [Pa/psf] | 5,400/113 |
| Mechanical Test Load (Rear) | [Pa/psf] | 3,000/63 |
| * Track Land Desire Lands: Cafety Fra | t== (1 E) | |

* 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 \times W \times H) | [mm] | 2,080 x 1,120 x 1,226 |
| Packaging Box Gross Weight | [kg] | 551 |

Dimensions (mm/inch)



 $\label{eq:product specifications are subject to change without notice. \\ LG425-435N2T-V5.pdf$



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