LG NeON®2 BiFacial

415W | 410W | 405W

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 back sheet. The dual faces of the cell result in higher energy generation.

Feature

Increased 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.

Enhanced Product Warranty

25 years Product Warranty

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

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® 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 Solar's lead, innovation and commitment to the industry.

LG NeON®2 BiFacial

LG415N2T-L5 | LG410N2T-L5 | LG405N2T-L5

Electrical Properties

Model		LG415N2T-L5			LG410N2T-L5			LG405N2T-L5		
		STC*	BiFi100**	BiFi200**	STC*	BiFi100**	BiFi200**	STC	BiFi100**	BiFi200**
Maximum Power(Pmax)	[W]	415	440	470	410	435	465	405	430	460
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]	9.82	10.40	11.11	9.79	10.38	11.10	9.76	10.36	11.08
Open Circuit Voltage (Voc, ± 5 %)	[V]	49.5	49.5	49.5	49.4	49.4	49.4	49.3	49.3	49.3
Short Circuit Current (Isc, ± 5 %)	[A]	10.50	11.12	11.88	10.46	11.10	11.86	10.42	11.06	11.83
Module Efficiency	[%]	20.0	21.2	22.7	19.8	21.0	22.4	19.5	20.7	22.2
Pmax Bifaciality Coefficient	[%]	75 ± 5								
Power Tolerance	[%]	0 ~ +3								

* STC (Standard Test Condition) : Irradiance 1000 W/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)* BiFi. Use 100W/m² for BiFi100 and 200W/m2 for BiFi200.

Electrical Properties (NMOT)

Model		LG415N2T-L5			LG410N2T-L5			LG405N2T-L5		
		STC	BiFi100	BiFi200	STC	BiFi100	BiFi200	STC	BiFi100	BiFi200
Maximum Power (Pmax)	[W]	311	330	352	307	326	348	303	322	345
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]	7.83	8.29	8.86	7.80	8.28	8.85	7.78	8.26	8.84
Open Circuit Voltage (Voc)	[V]	46.7	46.7	46.7	46.6	46.6	46.6	46.5	46.5	46.5
Short Circuit Current (Isc)	[A]	8.44	8.94	9.55	8.41	8.92	9.54	8.38	8.89	9.52

General Data

Cell Properties (Material / Type)	Monocrystalline / N-type
Cell Maker	LG
Cell Configuration	72 Cells (6 x 12)
Number of Busbar	12EA
Module Dimensions (L x W x H)	2,024 x 1,024 x 40 mm
Weight	21.5kg
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)	1,200mm x 2EA
Connector (Type / Maker)*	MC4 / MC

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]	5,400 / 113
Mechanical Test Load (Rear)	[Pa]	3,000 / 63

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

Temperature Characteristics

NMOT*	[°C]	42 ± 3
Pmax	[%/°C]	-0.35
Voc	[%/°C]	-0.26
Isc	[%/°C]	0.03

* NMOT (Nominal Module Operating Temperature) : Irradiance 800 W/m², Ambient temperature 20°C, Wind speed 1m/s, Spectrum AM1.5

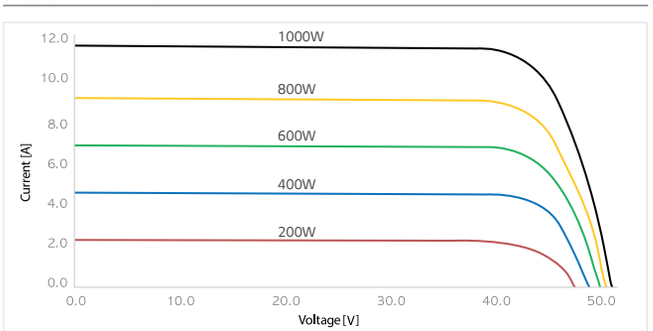
Certifications and Warranty

Certifications	IEC 61215-1/-1-1 / 2 : 2016, IEC 61730-1/2 : 2016, UL 61730-1/-2 : 2017
	ISO 9001, ISO 14001, ISO 50001
	OHSAS 18001
Salt Mist Corrosion Test	IEC 61701 : 2011 Severity 6
Ammonia Corrosion Test	IEC 62716 : 2013
Module Fire Performance	Type 1 (UL 61730)
Fire Rating	Class C (UL 790)
Product Warranty	25 Years
Output Warranty of Pmax	Initial 107.0%, 1 Year 104.9%, Annual -0.35%

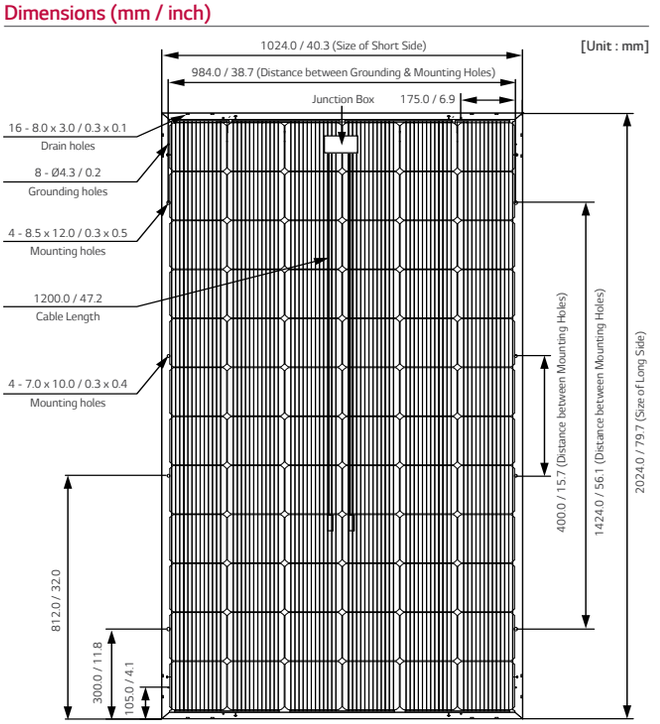
Packaging Configuration

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]	581

Characteristic Curves



Dimensions (mm / inch)



LG Life's Good

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Product specifications are subject to change without notice.
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