# LG NeON® 2 BiFacial

LG315N1T-A5 | LG310N1T-A5

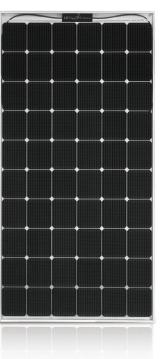


### 315W | 310W

The LG NeON® 2 BiFacial is designed to absorb irradiance not only from the front but also the rear of its NeON® cell by using a transparent back sheet. The dual faces of the cell allows for higher energy generation.







### Feature



### Enhanced Performance Warranty

LG NeON<sup>®</sup> 2 BiFacial has an enhanced performance warranty. LG NeON<sup>®</sup> 2 BiFacial is guaranteed at least 84.8% of initial performance.



### Better Performance on a Sunny Day

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



### Bifacial 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.



### More Generation on a Cloudy Day

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



### BOS (Balance Of System) Saving

LG NeON<sup>®</sup> 2 BiFacial can reduce the total number of strings due to its high module efficiency resulting in a more cost effective and efficient solar power system.



### Near Zero LID (Light Induced Degradation)

The n-type cells used in LG NeON<sup>®</sup> 2 BiFacial have almost no boron, which may cause the initial efficiency to drop, leading to less LID.

### 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.



## LG NeON<sup>®</sup> 2 BiFacial

### LG315N1T-A5 | LG310N1T-A5

### Electrical Properties (STC\*)

		LG315N1T-A5	Bifaical Gain**				LG310N1T-A5	Bifacial Gain**			
		LG315N11-A5	5%	10%	20%	30%	LG3 TUNTT-AS	5%	10%	20%	30%
Maximum Power (Pmax)	[W]	315	331	347	378	410	310	326	341	372	403
MPP Voltage (Vmpp)	[V]	33.5	33.5	33.5	33.6	33.6	33.1	33.1	33.1	33.2	33.2
MPP Current (Impp)	[A]	9.41	9.88	10.36	11.25	12.20	9.38	9.85	10.30	11.20	12.14
Open Circuit Voltage (Voc)	[V]	40.8	40.8	40.8	40.9	40.9	40.7	40.7	40.7	40.8	40.8
Short Circuit Current (Isc)	[A]	10.12	10.63	11.14	12.11	13.12	10.08	10.58	11.09	12.06	13.07
Module Efficiency	[%]	17.8	18.7	19.6	21.3	23.1	17.5	18.4	19.2	21.0	22.6
Operating Temperature	[°C]	-40 ~ +90									
Maximum System Voltage	[V]	1,000									
Maximum Series Fuse Rating	[A]	20									
Pmax Bifaciality Coefficient	[%]	82									
Power Tolerance	[%]	0~+3									

\* STC (Standard Test Condition): Irradiance 1,000 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. \*\* Bifacial Gain: The additional gain from the back side compared to the power of the front side at the standard test condition. It depends on installation condition. \*\*\* Bifaciality Coefficient: 25 years warranty based on front output warranty, tolerance ± 7%

#### Mechanical Properties

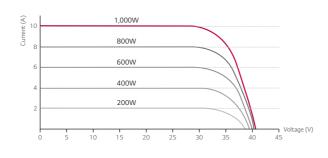
Cells	6 x 10		
Cell Type	Monocrystalline / N-type		
Cell Dimensions	161.7 x 161.7 mm / 6 inches		
# of Busbar	12(Multi Wire Busbar)		
Dimensions (L x W x H)	1,730 x 1,024 x 40 mm		
Front Load	6,000 Pa		
Rear Load	5,400 Pa		
Weight	19.6 kg		
Connector Type	MC4 (MC)		
Junction Box	IP68 with 3 Bypass Diodes		
Cables	1,000 mm x 2 ea		
Glass	High Transmission Tempered Glass		
Frame	Anodized Aluminium		

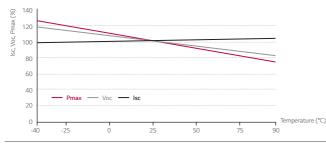
### Electrical Properties (NOCT\*)

Model		LG315N1T-A5	LG310N1T-A5		
Maximum Power (Pmax)	[W]	233	229		
MPP Voltage (Vmpp)	[V]	31.0	30.6		
MPP Current (Impp)	[A]	7.51	7.49		
Open Circuit Voltage (Voc)	[V]	38.0	37.9		
Short Circuit Current (Isc)	[A]	8.14	8.11		
* NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m <sup>2</sup> Ambient temperature 20 °C					

wind speed 1 m/s

### **Characteristic Curves**







LG Electronics Inc. Solar Business Division LG Twin Towers, 128 Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Korea www.lg-solar.com

#### Certifications and Warranty

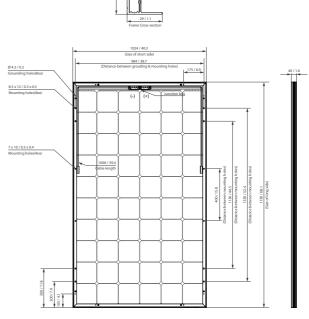
	UL 1703
	IEC 61215, IEC 61730-1/-2
Certifications	IEC 61701 (Salt mist corrosion test)
	IEC 62716 (Ammonia corrosion test)
	ISO 9001
Module Fire Performance	Туре 1
Fire Resistance Class	Class C
Product Warranty	12 Years
Output Warranty of Pmax	Linear Warranty*

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

### **Temperature Characteristics**

NOCT	[°C]	45 ± 3	
Pmax	[%/°C]	-0.37	
Voc	[%/°C]	-0.27	
lsc	[%/°C]	0.03	

### Dimensions (mm / inch)



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

Product specifications are subject to change without notice. DS-N5-72-W-G-F-EN-70615



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