

# LG NeON<sup>®</sup> 2 BiFacial

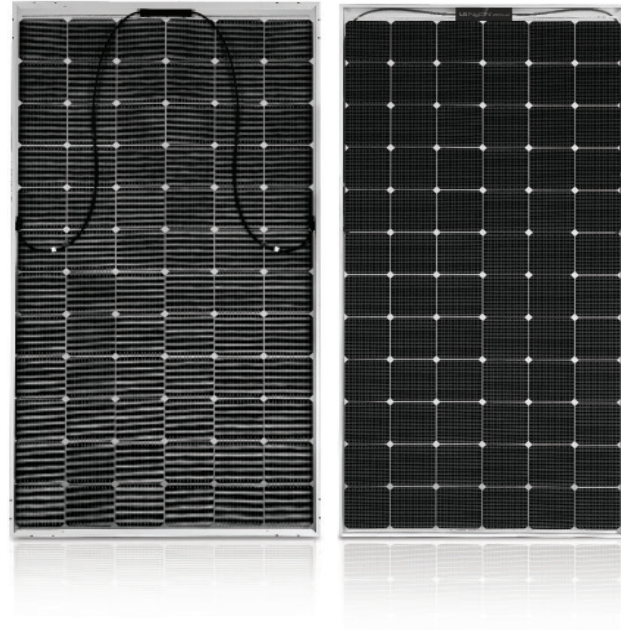
LG390N2T-A5 | LG385N2T-A5 | LG380N2T-A5



72

**390W | 385W | 380W**

The LG NeON<sup>®</sup> 2 BiFacial is designed to absorb irradiance not only from the front but also the rear of its NeON<sup>®</sup> 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.



### 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.



### Better Performance on a Sunny Day

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



### 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

LG390N2T-A5 | LG385N2T-A5 | LG380N2T-A5

## Electrical Properties (STC\*)

	[Unit]	LG390N2T - A5				LG385N2T - A5	Bifacial Gain**				LG380N2T - A5	Bifacial Gain**				
		5%	10%	20%	30%		5%	10%	20%	30%		5%	10%	20%	30%	
Maximum Power (Pmax)	[W]	390	410	429	468	507	385	404	424	462	501	380	399	418	456	494
MPP Voltage (Vmpp)	[V]	41.4	41.4	41.4	41.5	41.5	41.0	41.0	41.0	41.1	41.1	40.6	40.6	40.6	40.7	40.7
MPP Current (Impp)	[A]	9.43	9.90	10.36	11.28	12.22	9.40	9.86	10.34	11.24	12.19	9.37	9.83	10.30	11.20	12.14
Open Circuit Voltage (Voc)	[V]	49.2	49.2	49.2	49.3	49.3	49.1	49.1	49.1	49.2	49.2	49.0	49.0	49.0	49.1	49.1
Short Circuit Current (Isc)	[A]	10.15	10.66	11.17	12.18	13.2	10.11	10.61	11.12	12.10	13.12	10.07	10.57	11.08	12.05	13.06
Module Efficiency	[%]	18.5	19.4	20.3	22.1	24.0	18.2	19.1	20.0	21.9	23.7	18.0	18.9	19.8	21.6	23.4
Operating Temperature	[°C]	-40 ~ +90														
Maximum System Voltage	[V]	1,500(UL) / 1,000(IEC)														
Maximum Series Fuse Rating	[A]	20														
Pmax Bifaciality Coefficient***	[%]	82(output warranty for 25years)														
Power Tolerance	[%]	0 ~ +3														

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

\* STC (Standard Test Condition): Irradiance 1,000 W/m<sup>2</sup>, cell temperature 25 °C, AM 1.5

\*\* 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.

\*\*\* Pmax Bifaciality Coefficient 25 years warranty based on front output warranty, tolerance ± 7%

## Mechanical Properties

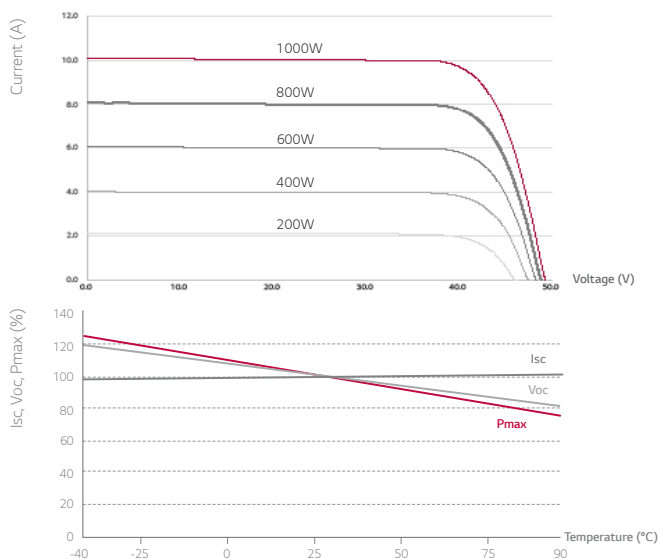
Cells	6 x 12
Cell Type	Monocrystalline / N-type
Cell Dimensions	161.7 x 161.7 mm / 6 inches
# of Busbar	12(Multi Wire Busbar)
Dimensions (L x W x H)	2,064 x 1,024 x 40 mm 81.26 x 40.31 x 1.57 in
Front Load	5,400 Pa / 113 psf
Rear Load	4,300 Pa / 90 psf
Weight	22.0 kg / 48.72 lb
Connector Type	MC4 (MC), PV-JM601A (JMTHY)
Junction Box	IP68 with 3 Bypass Diodes
Cables	1,200 mm x 2 ea / 47.24 in x 2 ea
Glass	High Transmission Tempered Glass
Frame	Anodized Aluminium

## Electrical Properties (NOCT\*)

Model	LG390N2T-A5	LG385N2T-A5	LG380N2T-A5
Maximum Power (Pmax)	[W] 289	285	282
MPP Voltage (Vmpp)	[V] 38.3	38.0	37.6
MPP Current (Impp)	[A] 7.54	7.51	7.49
Open Circuit Voltage (Voc)	[V] 45.9	45.8	45.8
Short Circuit Current (Isc)	[A] 8.17	8.14	8.10

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

## Characteristic Curves



## Certifications and Warranty

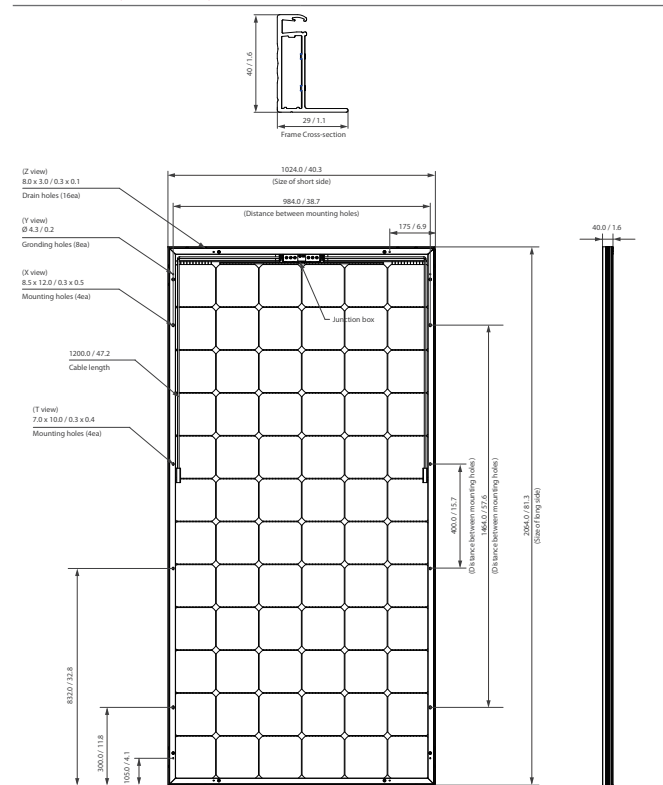
Certifications	UL 1703
	IEC 61215, IEC 61730-1/-2
	IEC 61701 (Salt mist corrosion test)
	IEC 62716 (Ammonia corrosion test)
	ISO 9001
Module Fire Performance	Type 1 (UL 1703)
Fire Resistance Class	Class C (ULC/ORD C1703, IEC 61730)
Product Warranty	12 Years
Output Warranty of Pmax	Linear Warranty*

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

## Temperature Characteristics

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

## Dimensions (mm / inch)



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



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Product specifications are subject to change without notice.  
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