# LG NpON<sup>®</sup> 2 BiFacial

LG385N2T-A5 | LG380N2T-A5 | LG375N2T-A5



### 385W | 380W | 375W

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



#### Better Performance on a Sunny Day

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



#### **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® 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® 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>4</sup> 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<sup>®</sup> 2 BiFacial

#### LG385N2T-A5 | LG380N2T-A5 | LG375N2T-A5

#### Electrical Properties (STC\*)

		LG385N2T - A5	Bifaical Gain**			LG380N2T - A5	Bifacial Gain**				LG375N2T - A5	Bifacial Gain**				
		LG365IV21 - A5	5%	10%	20%	30%	LG300N21 - A5	5%	10%	20%	30%	LG375N21 - A5	5%	10%	20%	30%
Maximum Power (Pmax)	[W]	385	404	424	462	501	380	399	418	456	494	375	394	413	450	488
MPP Voltage (Vmpp)	[V]	41.0	41.0	41.0	41.1	41.1	40.6	40.6	40.6	40.7	40.7	40.2	40.2	40.2	40.3	40.3
MPP Current (Impp)	[A]	9.40	9.86	10.34	11.24	12.19	9.37	9.8	10.30	11.20	12.14	9.34	9.80	10.27	11.17	12.11
Open Circuit Voltage (Voc)	[V]	49.1	49.1	49.1	49.2	49.2	49.0	49.0	49.0	49.1	49.1	48.9	48.9	48.9	49.0	49.0
Short Circuit Current (Isc)	[A]	10.11	10.61	11.12	12.10	13.12	10.07	10.57	11.08	12.05	13.06	10.03	10.53	11.01	12.00	13.00
Module Efficiency	[%]	18.2	19.1	20.0	21.9	23.7	18.0	18.9	19.8	21.6	23.4	17.7	18.6	19.5	21.3	23.1
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														
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%

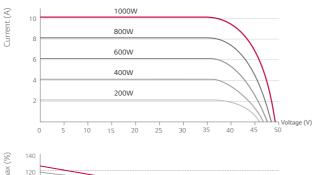
#### **Mechanical Properties**

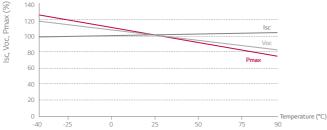
Meenanica roperties	
Cells	6 x 12
Cell Type	Monocrystalline / N-type
Cell Dimensions	161.7 x 161.7 mm / 6 inches
# of Busbar	12(Multi Wire Busbar)
Dimensions (L x W x H)	2,064 x 1,024 x 40 mm
	81.26 x 40.31 x 1.57 in
Front Load	5,400 Pa / 113 psf
Rear Load	4,300 Pa / 90 psf
Weight	22.1 kg / 48.72 lb
Connector Type	MC4 (MC)
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		LG385N2T-A5	LG380N2T-A5	LG375N2T-A5		
Maximum Power (Pmax)	[W]	285	282	278		
MPP Voltage (Vmpp)	[V]	38.0	37.6	37.2		
MPP Current (Impp)	[A]	7.51	7.49	7.47		
Open Circuit Voltage (Voc)	[V]	45.8	45.8	45.7		
Short Circuit Current (Isc)	[A]	8.14	8.10	8.07		
* 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



		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		Type 1(UL 1703)				
Fire Resistance Class		Class C*(ULC/ORD C 1703, IEC 61730)				
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				

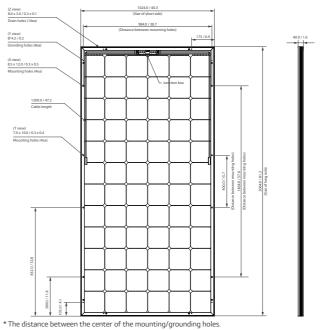
0.03

#### Dimensions (mm / inch)

lsc



[%/°C]



Product specifications are subject to change without notice. DS-T5-60-W-G-P-EN-70615



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