# Introducing the new star performer





Up to 390 watts LG Cello Design 6,000PA load





## LG NeON<sup>®</sup>H

# LG NeON® H – Better. More efficient. Guaranteed.

The new LG NeON<sup>®</sup> H solar module now offers even more performance. Equipped with half-cut technology, it provides up to 390 watts and withstands a pressure of 6,000 Pa. In addition, the LG NeON<sup>®</sup> H offers a 25-year product and performance guarantee for more performance and reliability.

# Local guarantor, global security

LG Solar is part of LG Electronics, a global and financially strong company, with over 60 years of experience.

**Good to know:** LG Electronics is the warrantor for your solar modules. LG Electronics has been present in Europe with many local subsidiaries for decades. The Warrantor's 2019 Global Sales in Billions of US Dollars



## Excellent quality, independently tested

You can rely on LG. We test our products with double the intensity specified in the IEC standard. This quality is valued by installers across Europe, which is why they have awarded our LG solar modules the "Top Brand PV" stamp of quality for the highest recommendation rates for the eighth time in a row.



## Higher output, higher yield

EUPD RESEARCH

TOP BRAND PV

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Semiconductor industry know-how is used to achieve a more even cell surface and thus increase efficiency up to over 21 %. The module can evenly apply incident light from both the front and back of the cell, making LG cells more efficient than conventional solar cells and producing a higher yield.

### Powerful design, guaranteed robust (LG standard)\*

With reinforced frame design, LG NeON<sup>®</sup> H can endure a front load up to 6,000Pa (represents snow height of normal snow of more than 1,8 meters) and a rear load up to 5,400Pa (represents wind speed of up to 93 m/s, compare max. wind speed of Hurricane Katrina 2005 of max. 75 m/s).



\* Module fully complies with the new IEC 61215-2: 2016 test procedures which confirmed 5.400 Pa front and 4.000 Pa rear side load. LG made internal tests to confirm 6.000 Pa front and 5.400 Pa rear side load also with new IEC 61215-2: 2016 norms. Further tests are on-going. Unless these tests turn out differently, LG confirms 6.000 Pa / 5.400 Pa. \*\* 1) 1st year: min. 98,5%. 2) After 2nd year: max. 0.33% annual degradation. 3) Min. 90.6% for 25 years.

# LG NeON®H

390W | 385W | 380W 375W | 370W

# 120 Cells

LG's new module, NeON® H, adopts CELLO technology. CELLO technology replaces busbars with thin wires to enhance power output and reliability. NeON® H demonstrates LG's efforts to increase customer's values beyond efficiency. It features enhanced warranty, durability, performance under real environment, and aesthetic design suitable for roofs.



CELLO technology

## Key features



#### Enhanced Performance Warranty

LG NeON<sup>®</sup> H has an enhanced performance warranty. After 25 years, LG NeON<sup>®</sup> H is guaranteed at least 90.6 % of initial performance.



#### Better Performance on a Sunny Day

LG NeON  $\ensuremath{^{(0)}}\xspace$  H now performs better on a sunny days thanks to its improved temperature coefficient.



#### 25 Years Product Warranty

In addition to the extended performance guarantee LG also offers a strong product guarantee for 25 years.



#### **Outstanding Durability**

With its reinforced frame design, LG NeON<sup>®</sup> H can endure a front load up to 6,000Pa, and a rear load up to 5,400Pa.

#### **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. The LG 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. \* The darkness of the panel may vary depending on the specific manufacturing procedure, and does not affect the quality and performance of the panel.

# LG NeON<sup>®</sup>H

#### **Mechanical Properties**

Cells	120 (6 x 20)				
Cell Vendor	LG				
Cell Type	Monocrystalline/N-type				
Number of Busbar	9 (Multi Wire Busbar)				
Dimensions (L x W x H)	1,768 x 1,042 x 40 mm				
Weight	18,5 kg				
Connector (Type/Maker)	MC4 / Stäubli				
Machanical Test Land's	6,000Pa (Front)				
Mechanical lest Load :	5,400Pa (Rear)				
Junction Box	IP68 with 3 Bypass Diodes				
Length of Cables	2 x 1,200 mm				
Front cover	Tempered Glass with AR Coating				
Frame	Anodized Aluminum				

\* Manufacturer Declaration according to IEC 61215 : 2005 #Mechanical Test Loads 5400 Pa / 4000 Pa based on IEC61215-2 : 2016 (Test Load = Design Load x Safety Factor (1.5))

#### Certifications and Warranty

Certifications	IEC 61215-1/-1-1/2:2016, IEC 61730-1/2:2016				
	OHSAS 18001				
	ISO 9001, ISO 14001				
Ammonia Corrosion Test	IEC 62716 : 2013				
Salt Mist Corrosion Test	IEC 61701 : 2011 Severity 6				
Module Fire Performance	Class C, Fire Class 1 (Italy)				
Product Warranty	25 years				
Output Warranty of Pmax (Measurement Tolerance ± 3%)	25 years linear warranty <sup>1</sup>				

<sup>1</sup> 1) 1st year: min. 98,5%. 2) After 2nd year: max. 0.33% annual degradation. 3) Min. 90.6% for 25 years.

#### **Temperature Coefficients**

NMOT <sup>3</sup>	42 ± 3 °C
Pmpp	-0.33 %/°C
Voc	-0.26 %/°C
lsc	0.04 %/°C

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Packaging	Configuration
1 acraging	configuration

Number of Modules Per Pallet	[EA]	25
Number of Modules Per 40ft HQ Container	[EA]	600
Packaging Box Dimensions (L x W x H)	[mm]	1,810 x 1,120 x 1,213
Packaging Box Gross Weight	[kg]	498

#### **Characteristic Curves**



#### Electrical Properties (STC<sup>2</sup>)

Model  LG390N1C  LG385N1C  LG380N1C  LG370N1C  LG370N1C    Maximum Power Pmax  [W]  390  385  3800  375  370    MPP Voltage Vmpp  [V]  35.8  35.5  35.1  34.8  34.4    MPP Current Impp  [A]  10.92  10.88  10.85  10.80  10.76    Open Circuit Voltage (Voc, ± 5%)  [V]  42.4  42.0  41.3  40.9    Short Circuit Current (Isc, ± 5%)  [M]  11.49  11.49  11.39  11.30  11.30    Module Efficiency  [%]  21.2  20.9  20.6  20.4  20.1    Operating Temperature  [%]  21.2  20.9  20.6  20.4  20.1    Maximum Series Fuse Rating  [Y]  6								
Maximum Power Pmax  [W]  390  385  380  375  370    MPP Voltage Vmpp  [V]  35.8  35.5  35.1  34.8  34.4    MPP Current Impp  [A]  10.92  10.88  10.85  10.80  10.76    Open Circuit Voltage (Voc, ± 5%)  [V]  42.4  42.0  41.7  41.3  40.9    Short Circuit Current (Isc, ± 5%)  [M]  11.49  11.49  11.39  11.30  11.30    Module Efficiency  [%]  21.2  20.9  20.6  20.4  20.1    Operating Temperature  [%]  21.2  20.9  20.6  20.4  20.1    Maximum System Voltage  [Y]  4  20.9  20.6  20.4  20.1    Maximum Series Fuse Rating  [Y]  0	Model		LG390N1C	LG385N1C	LG380N1C	LG375N1C	LG370N1C	
MPP Voltage Vmpp  [V]  35.8  35.5  35.1  34.8  34.4    MPP Current Impp  [A]  10.92  10.88  10.85  10.80  10.76    Open Circuit Voltage (Voc, ± 5%)  [V]  42.4  42.0  41.7  41.3  40.9    Short Circuit Current (Isc, ± 5%)  [A]  11.49  11.49  11.39  11.30  11.30    Module Efficiency  [%]  21.2  20.9  20.6  20.4  20.1    Operating Temperature  [%]  21.2  20.9  20.6  20.4  20.1    Maximum System Voltage  [Y]  4  20.9  20.6  20.4  20.1    Maximum Series Fuse Rating  [Y]  4  4  20.5  20.4  20.1    Power Tolerance  [X]  4  4  20.9  20.6  20.4  20.1	Maximum Power Pmax	[W]	390	385	380	375	370	
MPP Current Impp  [A]  10.92  10.88  10.85  10.80  10.76    Open Circuit Voltage (Voc, ± 5%)  [V]  42.4  42.0  41.7  41.3  40.9    Short Circuit Current (Isc, ± 5%)  [A]  11.49  11.49  11.39  11.35  11.30    Module Efficiency  [%]  21.2  20.9  20.6  20.4  20.1    Operating Temperature  [°]  C 40 ~ +85 40 ~ +85    Maximum System Voltage  [V]  G 20 ~ +3 40 ~ +3    Power Tolerance  [%]  G 20 ~ +3 40 ~ +3	MPP Voltage Vmpp	[V]	35.8	35.5	35.1	34.8	34.4	
Open Circuit Voltage (Voc, ± 5%)  [V]  42.4  42.0  41.7  41.3  40.9    Short Circuit Current (Isc, ± 5%)  [A]  11.49  11.39  11.39  11.30  11.30    Module Efficiency  [%]  21.2  20.9  20.6  20.4  20.1    Operating Temperature  [%] <th>MPP Current Impp</th> <th>[A]</th> <th>10.92</th> <th>10.88</th> <th>10.85</th> <th>10.80</th> <th>10.76</th>	MPP Current Impp	[A]	10.92	10.88	10.85	10.80	10.76	
Short Circuit Current (lsc, ± 5%)  [A]  11.49  11.39  11.39  11.30  11.30    Module Efficiency  [%]  21.2  20.9  20.6  20.4  20.1    Operating Temperature  [°C]   -40 - +85  -    Maximum System Voltage  [V]   -  -  -    Maximum Series Fuse Rating  [A]    -  -  -    Power Tolerance  [%]    0 ~ +3  -  -	Open Circuit Voltage (Voc, ± 5%)	[V]	42.4	42.0	41.7	41.3	40.9	
Module Efficiency  [%]  21.2  20.9  20.6  20.4  20.1    Operating Temperature  [%]  C  -40  +85  -40    Maximum System Voltage  [V]  C  -40  -40  -40    Maximum Series Fuse Rating  [A]  C  -20  -40  -40  -40    Power Tolerance  [%]  O  -20	Short Circuit Current (Isc, ± 5%)	[A]	11.49	11.44	11.39	11.35	11.30	
Operating Temperature  [°C]  -40~+85    Maximum System Voltage  [V]  1,000    Maximum Series Fuse Rating  [A]  20    Power Tolerance  [%]  0~+3	Module Efficiency	[%]	21.2	20.9	20.6	20.4	20.1	
Maximum System Voltage  [V]  1,000    Maximum Series Fuse Rating  [A]  20    Power Tolerance  [%]  0 ~ +3	Operating Temperature	[°C]		-40 ~ +85				
Maximum Series Fuse Rating  [A]  20    Power Tolerance  [%]  0~+3	Maximum System Voltage	[V]		1,000				
Power Tolerance  [%]  0 ~ +3	Maximum Series Fuse Rating	[A]		20				
	Power Tolerance	[%]		0~+3				

 $^2$  1) STC (Standard Test Condition): Irradiance 1,000 W/m², Module Temperature 25 °C, AM 1.5. , Measure Tolerance of Pmax:  $\pm$  3 %.

#### Electrical Properties (NMOT<sup>3</sup>)

Model		LG390N1C	LG385N1C	LG380N1C	LG375N1C	LG370N1C
Maximum Power Pmax	[W]	294	291	287	283	279
MPP Voltage Vmpp	[V]	33.6	33.4	33.0	32.7	32.4
MPP Current Impp	[A]	8.75	8.72	8.69	8.65	8.62
Open Circuit Voltage Voc	[V]	39.9	39.5	39.2	38.8	38.5
Short Circuit Current Isc	[A]	9.25	9.21	9.17	9.14	9.10

 $^3$  NMOT (Nominal Module Operating Temperature) : Irradiance 800 W/m2, Ambient temperature 20 °C, Wind speed 1 m/s, Spectrum AM 1.5

#### Dimensions (mm)







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