

LG SOLAR –
SOLAR ENERGY ON
A NEW LEVEL.

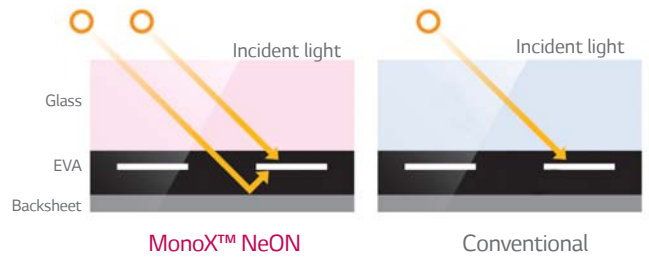


LG MonoX™ NeON – MAXIMUM OUTPUT FOR YOUR ROOF

It's not every day that you buy a solar installation for your home. So it's good if you can rely on independent tests when searching for the right module. This provides security – after all, you are making a decision for the coming decades. The powerful LG MonoX™ NeON solar modules maximize output for your electricity consumption and are also suitable for small roof sizes.

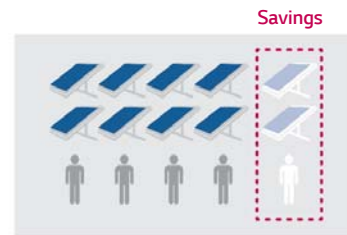
HIGHER OUTPUT, HIGHER YIELD

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 MonoX™ NeON cells more efficient than conventional solar cells and producing a higher yield.



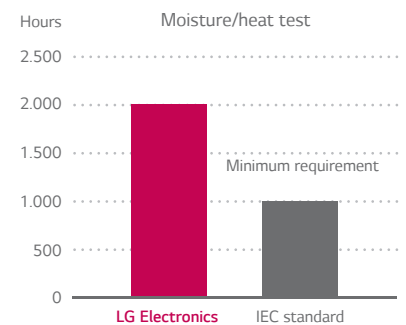
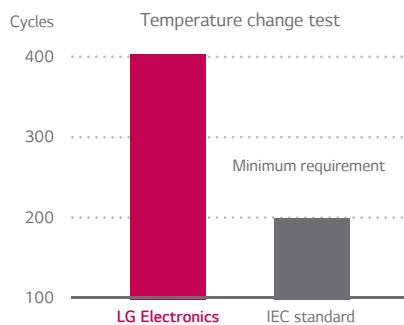
REDUCED SYSTEM COSTS

The use of optimized and powerful LG MonoX™ NeON solar modules lowers the system costs for the customer: the same output can be achieved with fewer modules, meaning fewer fittings and lower installation costs. This reduced use of materials ensures the careful and economic management of important resources.



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 highest recommendation rates. In 2013, LG won the Plus X Award, one of the top innovation awards for technology, sport and lifestyle. Moreover, in 2013 the MonoX™ NeON high-performance module also won the Intersolar AWARD, one of the top solar awards.



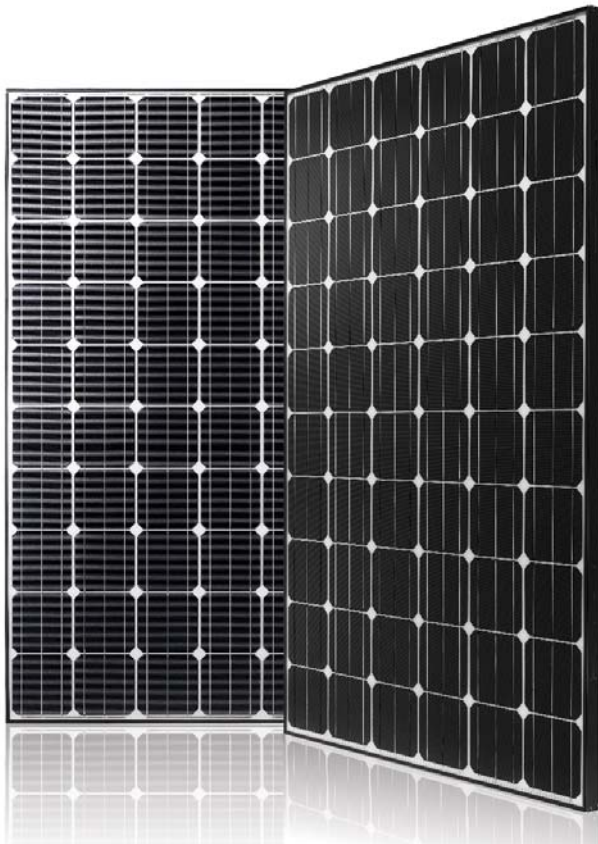
LOCAL WARRANTOR, GLOBAL SECURITY

LG Solar is part of LG Electronics – and is thus part of a global company with sound finances and over 50 years of tradition and experience.

Good to know: LG Electronics is the warrantor for your solar modules.



A STRONG PARTNER FULL OF ENERGY



LG Electronics, Inc. (Korean stock exchange: 06657.KS) is a global leader and technological innovator supplying electronics, information and communications products. At present, LG Electronics employs more than 87,000 staff at 113 factories worldwide. The company achieved total sales of 36.72 billion euros in the 2012 financial year.

LG is one of the world's largest manufacturers of mobile phones, flat-screen televisions, air conditioning units, washing machines and cooling appliances. As a forward-looking company, LG is committed to renewable energy technology and is expanding this area. LG produces its entire range of high-quality solar products at its parent plant in Korea.



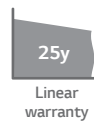
QUALITY THAT HAS EVERYONE BEAMING

Top installer brand



In 2014, LG solar modules were awarded the TOP BRAND PV stamp of quality for Germany, the United Kingdom and the Benelux countries. The stamp of quality is awarded by EuPD Research – a leading market research company – for one of the highest installer recommendation rates.

25-year linear warranty



LG Electronics gives a 25-year linear warranty on the MonoX™ NeON solar modules. This guarantees 6.7% more performance than the usual phased warranties.

~+3% positive output tolerance



LG Electronics only delivers modules with a 100% positive output tolerance. LG solar modules achieve at least the specified output – often even more. This three-per-cent higher output tolerance is free.

Sales of 36.7 bn euros in 2012



Since it was founded in 1958 (as Goldstar), LG Electronics has become one of the leading suppliers in the area of home electronics and solar power. As warrantor, LG Electronics guarantees the quality of its products through the financial strength of a company with global operations.

Easy installation



Handling LG modules is impressively easy – from transport through to installation. With each module weighing just 16.8 kg, they are easy to install, but can nevertheless withstand mechanical loads of up to 5.400 Pa.

100% EL quality test



Each LG solar module is put through extensive electroluminescence tests by LG Electronics. This allows us to identify cracks that are invisible to the human eye. If not identified, these could lead to reduced electricity yields.

MonoX™ NeON

LG305N1C-B3 / LG300N1C-B3 / LG295N1C-B3 / LG290N1C-B3

Mechanical Properties

CELLS	6 x 10
CELL VENDOR	LG
CELL TYPE	Monocrystalline
CELL DIMENSIONS	156.5 x 156.5 mm ²
# OF BUSBAR	3
FRONT COVER	High transmission tempered glass
DIMENSIONS (L x W x H)	1.640 x 1.000 x 35 (mm)
STATIC LOAD	5.400 Pa (snow) 2.400 Pa (wind)
WEIGHT	16.8 ± 0.5 kg
CONNECTOR TYPE	MC4, IP67
JUNCTION BOX	IP67 with 3 bypass diodes
LENGTH OF CABLES	2 x 1.000 mm
FRAME	Anodized aluminum

Certifications and Warranty

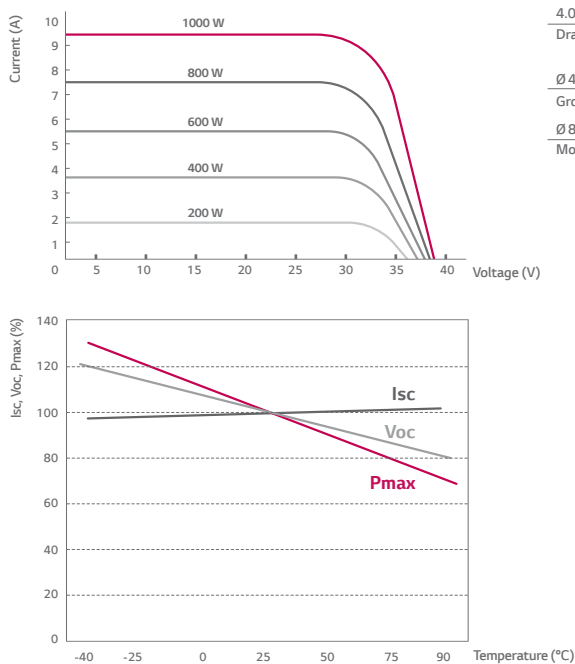
CERTIFICATIONS	IEC 61215, IEC 61730-1/-2, IEC 62716
	ISO 9001, ISO 14001, OHSAS 18001
	UL 1703
PRODUCT WARRANTY	10 years
OUTPUT WARRANTY OF P _{MAX} (MEASUREMENT TOLERANCE ± 3%)	25 years linear warranty ¹

¹ 1st year: 98%, 2-25 year: -0,7%/annual degradation, 81,2% for 25 years

Temperature Coefficients

NOCT	45.0 ± 2 °C
PMPP	-0.41 %/K
VOC	-0.29 %/K
ISC	0.04 %/K

Characteristic Curves



Electrical Properties (STC²)

	305 W	300 W	295 W	290 W
MPP VOLTAGE VMPP (V)	32.1	32.0	31.8	31.8
MPP CURRENT IMPP (A)	9.52	9.40	9.28	9.15
OPEN CIRCUIT VOLTAGE VOC (V)	40.0	39.8	39.7	39.6
SHORT CIRCUIT CURRENT ISC (A)	10.1	9.98	9.85	9.70
MODULE EFFICIENCY (%)	18.6	18.3	18.0	17.7
OPERATING TEMPERATURE (°C)	-40 ~ +90			
MAXIMUM SYSTEM VOLTAGE (V)	1.000			
MAXIMUM SERIES FUSE RATING (A)	20			
POWER TOLERANCE (%)	0 ~ +3			

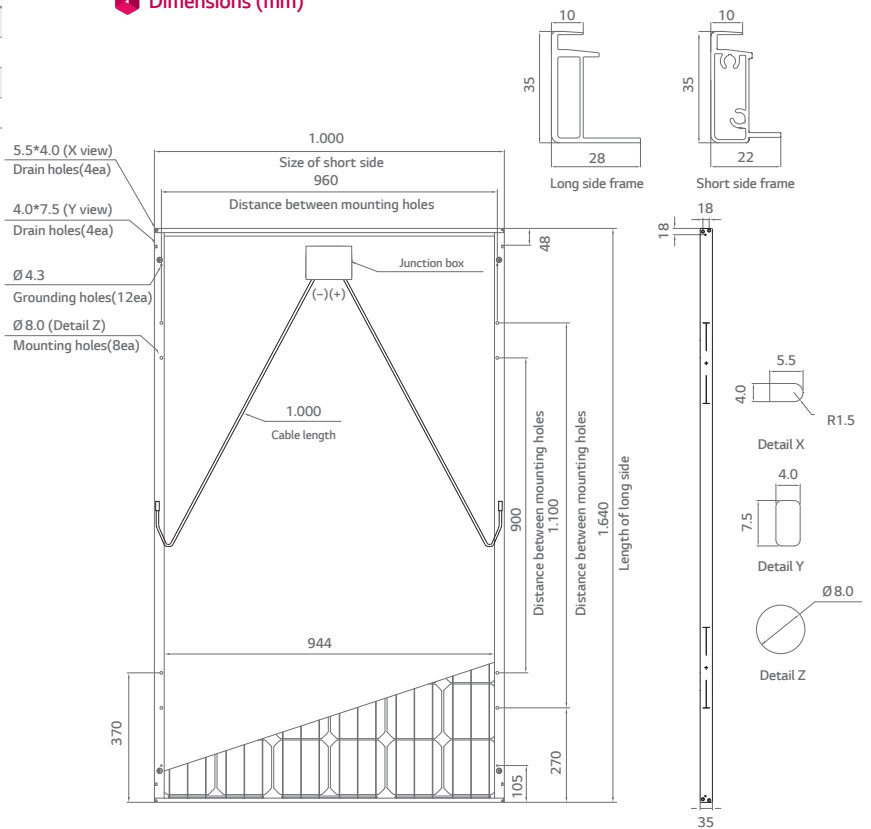
² STC (Standard Test Conditions): Irradiance 1000 W/m², module temperature 25 °C, AM 1.5
Application Class: A (according to IEC 61730), Safety Class: II
The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion.

Electrical Properties (NOCT³)

	305 W	300 W	295 W	290 W
MAXIMUM POWER P _{MAX} (W)	223	220	215	212
MPP VOLTAGE VMPP (V)	29.4	29.3	29.1	29.0
MPP CURRENT IMPP (A)	7.59	7.50	7.40	7.30
OPEN CIRCUIT VOLTAGE VOC (V)	37.0	36.9	36.8	36.7
SHORT CIRCUIT CURRENT ISC (A)	8.14	8.05	7.94	7.82
EFFICIENCY REDUCTION (FROM 1.000 W/M ² TO 200 W/M ²)	< 3.5 %			

³ NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m², ambient temperature 20 °C, wind speed 1 m/s

Dimensions (mm)



The distance between the center of the mounting/grounding holes



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All details in this data sheet comply with DIN EN 50380.
Subject to errors and alterations.

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