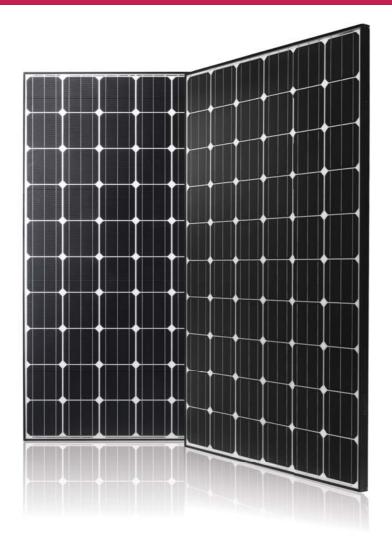




# LG300N1C / LG295N1C / LG290N1C / LG285N1C / LG280N1C



LG Electronics, Inc. (Korea Exchange: 06657.KS) is one of the globally leading companies and technology innovator for electronics, information and communication products. LG Electronics currently employs more than 91.000 people worldwide in 117 companies. In fiscal year 2011 a turnover of 48,97 billion USD has been achieved.

LG is one of the world's largest manufacturers of mobile phones, flat screen TVs, air conditioners, washing machines and refrigerators. As a futureoriented company, LG relies on the technology of renewable energies and is expanding it. The entire range of high quality solar products are being manufactured in LG's leading production site Korea.













# LG's High Efficient Cell Technology

Driven by LG's own N-Type technology, LG's highefficiency modules will provide customers with high economic benefits.



### **Reliable Warranties**

LG stands by its products with the strength of a global corporation and sterling warranty policies. Together with a 10 year product warranty a 25 year linear performance warranty is offered.



# 100% EL Test Completed

All LG modules are tested at various stages of the production by Electroluminescence inspection. The EL inspection detects cracks unseen by the naked eye.



# **Positive Power Tolerance**

LG provides rigorous quality testing to solar modules to assure customers of the stated power outputs of all modules, with a positive nominal tolerance starting at 0%.



### **Light and Robust**

With a weight of just 16.8 kg, LG modules are proven to demonstrate outstanding durability against external pressure up to 5400 Pa.



# **Convenient Installation**

LG modules are carefully designed to help installers benefit from quick and easy installations throughout carrying, grounding, and connecting stages of modules.



# LG300N1C / LG295N1C / LG290N1C / LG285N1C / LG280N1C

### Mechanical Properties

Cells	6 x 10			
Cell vendor	LG			
Cell type	Monocrystalline			
Cell dimensions	156 x 156 mm²			
Cell busbar	3			
Front cover	Glass			
Dimensions (L x W x H)	1640 x 1000 x 35 (mm)			
Static load	5400 Pa (snow)			
	2400 Pa (wind)			
Weight	16.8 ± 0.5 kg			
Connector type	MC4 connector IP 67			
Junction box	IP 67 with 3 bypass diodes			
Length of cables	2 x 1000 mm			
Frame	Anodized aluminum			

### Certifications and Warranty

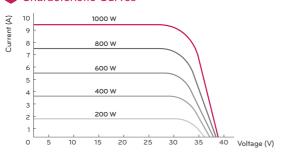
Certifications	IEC 61215, IEC 61730-1/-2,		
	ISO 14001, ISO 9001,		
	OHSAS 18001,		
	UL 1703		
Product warranty	10 years		
Output warranty of Pmax (Measurement tolerance ± 3%)	25 years linear warranty <sup>1</sup>		

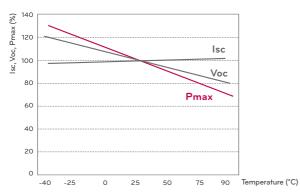
<sup>&</sup>lt;sup>1</sup>1st year: 97%, 2nd - 25th year: -0,7%/a, 25th year: 80,2%

### 🕝 Temperature Coefficients

NOCT	45 ± 2 °C	
Pmpp	-0.42 %/K	
Voc	-0.31 %/K	
Isc	0.03 %/K	

#### Characteristic Curves





# Electrical Properties (STC²)

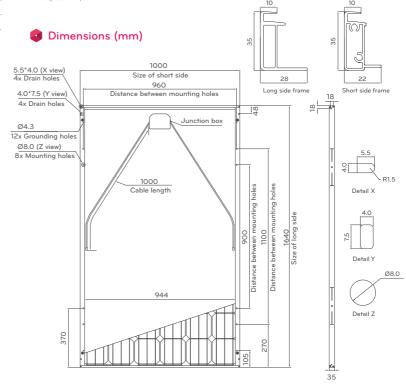
300 W	295 W	290 W	285 W	280 W
300	295	290	285	280
32.0	31.9	31.8	31.6	31.5
9.42	9.30	9.19	9.09	8.97
39.5	39.3	39.2	39.0	38.9
10.0	9.91	9.80	9.68	9.56
18.3	18.0	17.7	17.4	17.1
-40 ~ +90				
1000				
15				
0 ~ +3				
	300 32.0 9.42 39.5 10.0	300 295 32.0 31.9 9.42 9.30 39.5 39.3 10.0 9.91 18.3 18.0	300 295 290 32.0 31.9 31.8 9.42 9.30 9.19 39.5 39.3 39.2 10.0 9.91 9.80 18.3 18.0 177 -40~+90 1000 15	300 295 290 285 32.0 31.9 31.8 31.6 9.42 9.30 9.19 9.09 39.5 39.3 39.2 39.0 10.0 9.91 9.80 9.68 18.3 18.0 17.7 17.4 -40~+90 1000 15

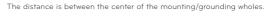
 $<sup>^2</sup>$  STC (Standard Test Conditions): Irradiance 1000 W/m², module temperature 25 °C, AM 1.5 Application Class: A (according to IEC 61730), Safety Class: II

# Electrical Properties (NOCT³)

	300 W	295 W	290 W	285 W	280 W
Maximum power (Pmpp)	220	216	213	210	206
MPP voltage (Vmpp)	29.3	29.2	29.1	28.9	28.8
MPP current (Impp)	7.51	7.42	7.33	7.25	7.15
Open circuit voltage (Voc)	36.5	36.3	36.2	36.0	35.9
Short circuit current (Isc)	8.08	7.98	7.89	7.80	7.70
Efficiency reduction (from 1000 W/m² to 200 W/m²)	< 4.5 %				

 $^3$  NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m², ambient temperature 20  $^\circ$ C,







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All specifications of this data sheet comply with DIN EN 50380.

Subject to change without notice.



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