

# MULTI X™

LG245R1C / LG240R1C / LG235R1C / LG230R1C

With more than half a century of consumer electronics technology and 25 years of in-depth R&D, LG is pleased to introduce its state-of-the-art photovoltaic module, Multi X™.

LG photovoltaic modules are perfect for general on-grid applications in residential, commercial and utility services.

Built with reliable materials, a unique design and systematic quality assurance, LG is proud to provide its customers with unmatched product value and services.



### LG Cell Technology

With 25 years of devoted and thorough research and development, LG has successfully developed a solar cell that is cutting edge and reliable.



### Positive Power Tolerance

LG delivers its products with the world's most rigorous product assurance – a nominal power tolerance starting at 0%.



### Superior Durability

LG photovoltaic modules withstand a maximum load of 5400 Pa, are light in weight and built with glass that is slim yet durable.



### Unique Frame Design

LG photovoltaic modules are uniquely designed to drain liquid in all slopes and angles.



### Warranty & Services

LG offers a reliable support policy that is comprised of a 10-years product warranty, 12-years 90% power warranty and 25-years 80% power warranty.



### Certified Laboratory

LG has met the core standard specifications for solar modules and became the official test laboratory certified by TÜV Rheinland and Underwriters Laboratories.

### Mechanical Properties

Cells	6 x 10
Cell vendor	LG
Cell type	Multicrystalline
Cell dimensions	156 x 156 mm <sup>2</sup> / 6 x 6 in <sup>2</sup>
# of busbar	3
Dimensions (L x W x H)	1632 x 986 x 42 mm 64.25 x 38.82 x 1.65 in
Maximum load (Pa)	5400 (113 psf)
Weight	19 kg / 41.89 lb
Connector type	Yukita connector IP 67/MC4 from Jan '12
Junction box	IP 65 with 3 bypass diodes
Length of cables	2 x 1000 mm / 2 x 39.37 in

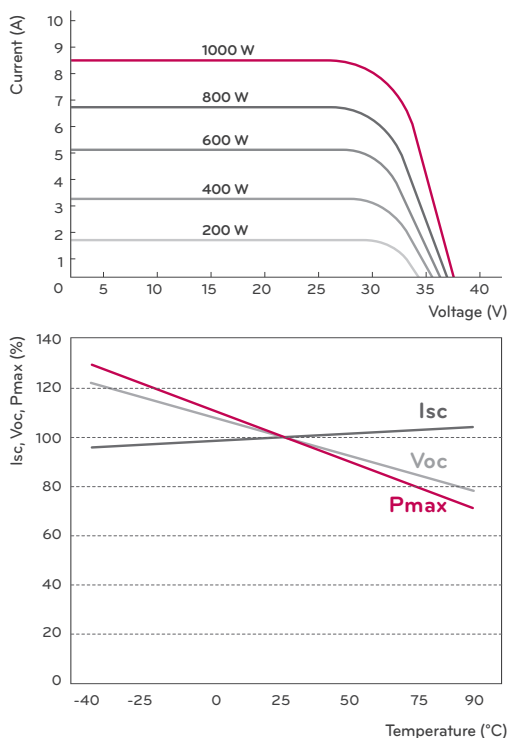
### Certifications and Warranty

Certifications	IEC 61215 Ed.2, IEC 61730
Product warranty	10 years
Output warranty of Pmin	12 years - 90% 25 years - 80%

### Temperature Coefficients

NOCT	45.6 ± 2 °C
Pmpp	-1.037 W/K, -0.45 %/K
Voc	-0.125 V/K, -0.340 %/K
Isc	4.96 mA/K, 0.060 %/K

### Characteristic Curves



### Electrical Properties (STC\*)

	LG245R1C	LG240R1C	LG235R1C	LG230R1C
Maximum power at STC (Pmax)	245	240	235	230
MPP voltage (Vmpp)	30.5	30	29.5	29.1
MPP current (Impp)	8.13	8.02	7.97	7.93
Open circuit voltage (Voc)	37.5	37.2	36.9	36.6
Short circuit current (Isc)	8.74	8.61	8.48	8.35
Module efficiency (%)	15.2	14.9	14.6	14.3
Operating temperature (°C)	-40 ~ +90			
Maximum system voltage (V)	1000			
Maximum series fuse rating (A)	15			
Power tolerance (%)	0 ~ +3			

\* STC (Standard Test Condition): Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM 1.5

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

### Electrical Properties (NOCT\*)

	LG245R1C	LG240R1C	LG235R1C	LG230R1C
Maximum power (W)	181.01	175.34	171.03	167.61
Maximum power voltage (V)	27.48	26.98	26.48	26.08
Maximum power current (A)	6.59	6.5	6.46	6.43
Open circuit voltage (Voc)	34.78	34.48	34.18	33.88
Short circuit current (Isc)	7.08	6.97	6.87	6.76
Efficiency reduction (from 1000 W/m <sup>2</sup> to 200 W/m <sup>2</sup> )	< 4.5 %			

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

### Dimensions (mm/in)

