LG NeON® R

405W

LG NeON® R is powerful solar module that provides world-class performance. A new cell structure that eliminates electrodes on the front maximizes the utilization of light and enhances reliability. LG NeON® R is a result of LG’s efforts to increase customer’s values beyond efficiency. LG NeON® R features enhanced durability, performance under real-world conditions, an enhanced warranty and aesthetic design suitable for roofs.

Features

- **Roof Aesthetics**
  - LG NeON® R has been designed with aesthetics in mind: the lack of any electrodes on the front creates an improved, modern aesthetic.

- **Enhanced Performance Warranty**
  - The LG NeON® R has an enhanced performance warranty. After 25 years, LG NeON® R is guaranteed at least 92.5% of initial performance.

- **25-Year Limited Product Warranty**
  - The NeON® R is covered by a 25-year limited product warranty. In addition, up to $450 of labor costs will be covered in the rare case that a module needs to be repaired or replaced.

- **More generation per square meter**
  - The LG NeON® R has been designed to significantly enhance its output, making it efficient even in limited space.

When you go solar, ask for the brand you can trust: LG Solar

About LG Electronics USA, Inc.

LG Electronics is a global leader in electronic products in the clean energy markets by offering solar PV panels and energy storage systems. 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, 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’s leadership and innovation in the solar industry.
LG NeON®

LG405Q1C-A6

General Data

- **Cell Properties (Material/Type):** Monocrystalline / N-type
- **Cell Maker:** LG
- **Cell Configuration:** 60 Cells (6 x 10)
- **Module Dimensions (L x W x H):** 1,740mm x 1,042mm x 40mm
- **Weight:** 18.5 kg
- **Glass (Material):** Tempered Glass with AR Coating
- **Backsheet (Color):** White
- **Frame (Material):** Anodized Aluminium
- **Junction Box (Protection Degree):** IP 68 with 3 Bypass Diodes
- **Cables (Length):** 1,250mm x 2EA
- **Connector (Type/Maker):** MC 4 / MC

**Electrical Properties (NMOT):**

- **Model:** LG405Q1C-A6
- **Maximum Power (Pmax):** 307 W
- **MPP Voltage (Vmpp):** 35.4 V
- **MPP Current (Impp):** 8.67 A
- **Open Circuit Voltage (Voc):** 41.9 V
- **Short Circuit Current (Isc):** 9.15 A
- **Module Efficiency:** 22.3%
- **Power Tolerance:** 0 ~ 3%
- **Temperature Characteristics:**
  - NMOT*: 1°C, Voc: -0.29%, Impp: 0.04%
- ***NMOT (Nominal Module Operating Temperature): Irradiance 800 W/m², Ambient temperature 20°C, Wind speed 1 m/s, Spectrum AM 1.5**

**Electrical Properties (STC*):**

- **Model:** LG405Q1C-A6
- **Maximum Power (Pmax):** 405 W
- **MPP Voltage (Vmpp):** 37.5 V
- **MPP Current (Impp):** 10.82 A
- **Open Circuit Voltage (Voc):** 43.9 V
- **Short Circuit Current (Isc):** 11.35 A
- **Module Efficiency:** 22.3%
- **Power Tolerance:** 0 ~ 3%
- **Temperature Characteristics:**
  - STC (Standard Test Condition): Irradiance 1000 W/m², Cell temperature 25°C, AM 1.5
  - Measure Tolerance: ±3%

Certifications and Warranty

- **ISO 9001, ISO 14001, ISO 50001, OHSAS 18001**
- **Salt Mist Corrosion Test:** IEC 61701-2012 Severity 6
- **Ammonia Corrosion Test:** IEC 62716 : 2013
- **Module Fire Performance:** Type 1 (UL 61730)
- **Fire Rating:** Class C (UL 790, ULC / ORD C 1703)
- **Solar Module Product Warranty:** 25 Years
- **Solar Module Output Warranty:** Linear Warranty*

- **Temperature Characteristics:**
  - NMOT*: 44 ± 3°C
  - Pmax: -0.29% / °C
  - Voc: -0.24% / °C
  - Isc: 0.04% / °C
- ***NMOT (Nominal Module Operating Temperature): Irradiance 800 W/m², Ambient temperature 20°C, Wind speed 1 m/s, Spectrum AM 1.5**

- **Operating Conditions:**
  - Operating Temperature*: -40 ~ +85°C
  - Maximum System Voltage: 1,000 V
  - Maximum Series Fuse Rating: 20 A
  - Mechanical Test Load* (Front): 5,400 N
  - Mechanical Test Load* (Rear): 4,000 N
- **Packaging Configuration:**
  - Number of Modules per Pallet: 25 EA
  - Number of Modules per 40' Container: 650 EA
  - Number of Modules per 53' Container: 850 EA
  - Packaging Box Dimensions (L x W x H): 1,790 x 1,120 x 1,227 mm
  - Packaging Box Dimensions (L x W x H): 70.5 x 44.1 x 48.3 in
  - Packaging Box Gross Weight: 498 kg
  - Packaging Box Gross Weight: 1,098 lb

Dimensions (mm/inch)

- 1042 / 41.0 (Size of Short Side)
- 175.6 / 6.9 (Junction Box)
- 16.0 / 0.63 (Distance between Mounting Holes)
- 8.5 / 0.33 (Distance between Mounting Holes)
- 16.5 / 0.65 (Distance between Mounting Holes)
- 8.5 / 0.33 (Distance between Mounting Holes)
- 43.3 / 1.7 (Distance between Mounting Holes)
- 1250 / 49.2 (Cable Length)
- 40.0 / 1.57 (Distance between Drain Holes)
- 220.0 / 8.6 (Distance between Drain Holes)
- 16 - 8.0 x 3.0 / 0.3 x 0.1 (Drain Holes)
- 8 - Ø4.3 / 0.2 (Grounding Holes)
- 1100.0 / 43.3 (Distance between Mounting Holes)
- 1300.0 / 51.2 (Distance between Mounting Holes)
- 1740.0 / 68.5 (Size of Long Side)

- 105.0 / 4.1 (Cable Length)
- 200W
- 400W
- 600W
- 800W
- 1000W

- 0.0 2.0 4.0 6.0 8.0 10.0 12.0

- 0.0 5.0 10.0 15.0 20.0 25.0 30.0 35.0 40.0 45.0

- I-V Curves

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Product specifications are subject to change without notice.

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