

# NM12-38L

**12V 38Ah / 10hr rate****BATTERY**  
**Genergy**

## Introduction

**Genergy NML (Long life) Series** is designed for solar and renewable energy system. GEL electrolyte and AGM separator are applied in this series with feature of long service life. It is widely used in solar and wind power system, UPS and power utility.

## Battery Features

- Increase durability and deep cycle ability for heavy demand applications
- Low self-discharge
- Fully tank formed plates
- Low impurity electrolyte
- Spill proof / leak proof
- Multi-position usage
- ABS case and cover VO upon request
- Very high purity lead

## Electrical Specification

Design floating Life @ 20°C (68°F) ..... 10 years

Nominal Capacity @ 25°C /77°F

20 hour rate 1.97A to 1.75Vpc ..... 39.4 Ah

10 hour rate 3.84A to 1.75Vpc ..... 38.4 Ah

Internal Resistance

(Fully charged battery @ 25°C /77°F ) ..... 10mΩ

Max. Discharge Current @ 25°C /77°F ..... 380 A (5S)

Charge Methods: Constant voltage charge @ 25°C /77°F

Cycle Use ..... 14.7 ~ 14.9V

Max. Current ..... 9.5 A

Standby Use ..... 13.6 ~ 13.8V

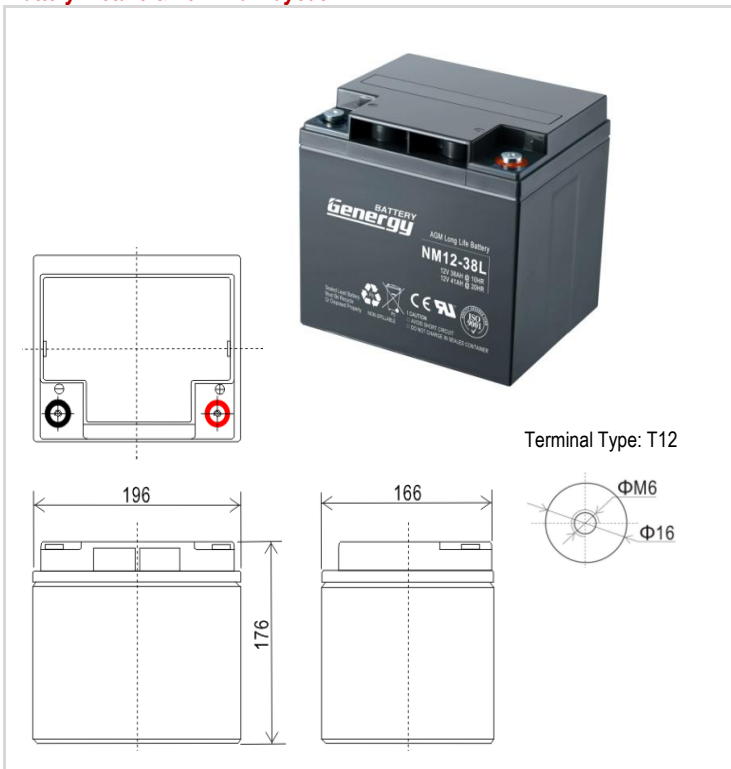
Operating Temperature Range ..... -30 ~ 50°C

*Notes: battery voltage must be adjusted according to temperature.**Please refer to our recommendation.*

Self-Discharge

&lt;3% of capacity declined per month @ 25°C (77°F).

## Battery Picture & Terminal Layout



## Dimension & Weight

| Length   | Dimension (± 2mm) |          |              | Weight (± 2%) |
|----------|-------------------|----------|--------------|---------------|
|          | Width             | Height   | Total Height |               |
| 196 mm   | 166 mm            | 176 mm   | 176 mm       | 12.1 kg       |
| 7.7 inch | 6.5 inch          | 6.9 inch | 6.9 inch     | 26.7 lbs      |

## Typical Applications

- Solar Energy System
- Wind Energy System
- Power Utility
- UPS/EPS

## Certificates



## Constant Current Discharge (Amperes @ 25°C /77°F)

| V/cell | 10min | 15min | 20min | 25min | 30min | 35min | 40min | 45min | 50min | 55min | 1hr  | 2hr   | 3hr   | 4hr  | 5hr  | 10hr | 20hr |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|------|------|------|
| 1.60   | 91.7  | 70.0  | 60.5  | 51.0  | 43.1  | 38.8  | 36.2  | 33.6  | 31.4  | 29.5  | 28.1 | 15.24 | 10.84 | 9.00 | 7.36 | 3.93 | 1.99 |
| 1.65   | 87.1  | 66.5  | 57.7  | 49.0  | 42.0  | 37.8  | 35.3  | 32.8  | 30.7  | 29.0  | 27.7 | 14.94 | 10.63 | 8.81 | 7.19 | 3.91 | 1.99 |
| 1.70   | 83.5  | 63.7  | 55.5  | 47.2  | 40.6  | 36.5  | 34.1  | 31.7  | 29.8  | 28.1  | 27.0 | 14.44 | 10.39 | 8.61 | 7.02 | 3.88 | 1.99 |
| 1.75   | 79.6  | 60.8  | 53.0  | 45.2  | 39.1  | 35.1  | 32.9  | 30.7  | 28.9  | 27.4  | 26.4 | 14.04 | 10.16 | 8.42 | 6.87 | 3.84 | 1.97 |
| 1.80   | 75.5  | 57.7  | 50.4  | 43.1  | 37.5  | 33.7  | 31.6  | 29.5  | 27.9  | 26.5  | 25.6 | 13.53 | 9.92  | 8.21 | 6.70 | 3.74 | 1.95 |

## Constant Power Discharge (Watts/cell @ 25°C /77°F)

| V/cell | 10min | 15min | 20min | 25min | 30min | 35min | 40min | 45min | 50min | 55min | 1hr  | 2hr   | 3hr   | 4hr   | 5hr   | 10hr | 20hr |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|------|------|
| 1.60   | 159.3 | 121.6 | 107.0 | 92.4  | 80.6  | 72.7  | 67.5  | 62.3  | 58.0  | 54.2  | 51.2 | 28.16 | 20.50 | 17.01 | 14.01 | 7.85 | 4.14 |
| 1.65   | 153.6 | 117.3 | 103.4 | 89.6  | 78.4  | 70.7  | 65.8  | 60.8  | 56.6  | 53.1  | 50.3 | 27.59 | 20.31 | 16.82 | 13.82 | 7.77 | 4.14 |
| 1.70   | 147.7 | 112.8 | 99.6  | 86.4  | 75.9  | 68.5  | 63.8  | 59.1  | 55.1  | 51.9  | 49.3 | 26.93 | 19.93 | 16.52 | 13.61 | 7.62 | 4.08 |
| 1.75   | 141.3 | 107.9 | 95.4  | 83.0  | 73.2  | 66.1  | 61.6  | 57.2  | 53.5  | 50.5  | 48.2 | 26.07 | 19.36 | 16.12 | 13.36 | 7.56 | 4.01 |
| 1.80   | 134.4 | 102.6 | 90.9  | 79.3  | 70.3  | 63.4  | 59.2  | 55.0  | 51.6  | 48.9  | 46.8 | 25.15 | 18.85 | 15.71 | 13.06 | 7.49 | 3.97 |

Subject to revision without notice. Please contact our sales representatives for latest version.

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Page 1 of 2

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## Graphs

