

# NM12-50

**12V50Ah / 10hr rate****BATTERY**  
**Genergy**

## Introduction

**Genergy NM (33Ah-250Ah) series** is designed for standby use with 10-year design life in float service. The series battery is featured of high consistency, excellent performance and reliable standby service life. It is widely applied in float service, UPS/EPS, medical equipment, telecom, photovoltaic, control system and security system.

## 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 2.57A to 1.75Vpc ..... 51.4 Ah

10 hour rate 5A to 1.75Vpc ..... 50 Ah

Internal Resistance

(Fully charged battery @ 25°C / 77°F) ..... 7mΩ

Max. Discharge Current @ 25°C / 77°F ..... 520 A (5S)

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

Cycle Use ..... 14.7 ~ 14.9V

Max. Current ..... 13 A

Standby Use ..... 13.6 - 13.8V

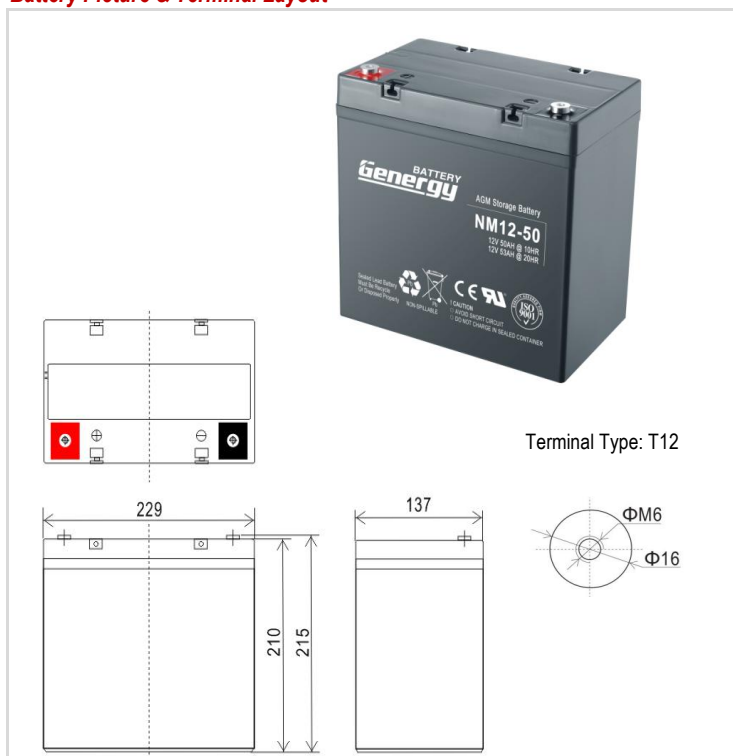
Operating Temperature Range ..... -30 ~ 50°C

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

Self-Discharge

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 |               |
| 229 mm   | 137 mm            | 210 mm   | 215 mm       | 16.1 kg       |
| 9.0 inch | 5.4 inch          | 8.3 inch | 8.5 inch     | 35.5 lbs      |

## Typical Applications

- Telecommunications
- Power Utility
- Data Center
- 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   | 119.55 | 91.26 | 78.84 | 66.42 | 56.22 | 50.58 | 47.17 | 43.75 | 40.91 | 38.45 | 36.63 | 19.86 | 14.13 | 11.74 | 9.60 | 5.13 | 2.59 |
| 1.65   | 113.53 | 86.66 | 75.27 | 63.88 | 54.71 | 49.24 | 46.00 | 42.75 | 40.08 | 37.78 | 36.14 | 19.48 | 13.86 | 11.49 | 9.37 | 5.10 | 2.59 |
| 1.70   | 108.84 | 83.08 | 72.30 | 61.51 | 52.95 | 47.61 | 44.49 | 41.38 | 38.83 | 36.66 | 35.14 | 18.82 | 13.54 | 11.22 | 9.15 | 5.05 | 2.59 |
| 1.75   | 103.82 | 79.25 | 69.07 | 58.90 | 50.94 | 45.81 | 42.91 | 40.00 | 37.66 | 35.71 | 34.39 | 18.30 | 13.25 | 10.97 | 8.96 | 5.00 | 2.57 |
| 1.80   | 98.46  | 75.16 | 65.68 | 56.19 | 48.93 | 43.97 | 41.24 | 38.50 | 36.33 | 34.55 | 33.40 | 17.64 | 12.93 | 10.70 | 8.73 | 4.87 | 2.54 |

## 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   | 207.63 | 158.50 | 139.48 | 120.47 | 105.02 | 94.73 | 88.00 | 81.26 | 75.55 | 70.72 | 66.79 | 36.71 | 26.72 | 22.17 | 18.26 | 10.23 | 5.40 |
| 1.65   | 200.26 | 152.87 | 134.81 | 116.76 | 102.25 | 92.22 | 85.74 | 79.26 | 73.80 | 69.22 | 65.54 | 35.97 | 26.47 | 21.92 | 18.01 | 10.13 | 5.40 |
| 1.70   | 192.56 | 146.99 | 129.81 | 112.62 | 98.99  | 89.29 | 83.15 | 77.01 | 71.88 | 67.64 | 64.30 | 35.10 | 25.98 | 21.54 | 17.74 | 9.93  | 5.32 |
| 1.75   | 184.19 | 140.60 | 124.37 | 108.15 | 95.47  | 86.11 | 80.31 | 74.50 | 69.72 | 65.82 | 62.81 | 33.99 | 25.24 | 21.01 | 17.42 | 9.86  | 5.23 |
| 1.80   | 175.15 | 133.70 | 118.52 | 103.33 | 91.71  | 82.68 | 77.22 | 71.75 | 67.30 | 63.74 | 61.07 | 32.78 | 24.58 | 20.48 | 17.03 | 9.76  | 5.18 |

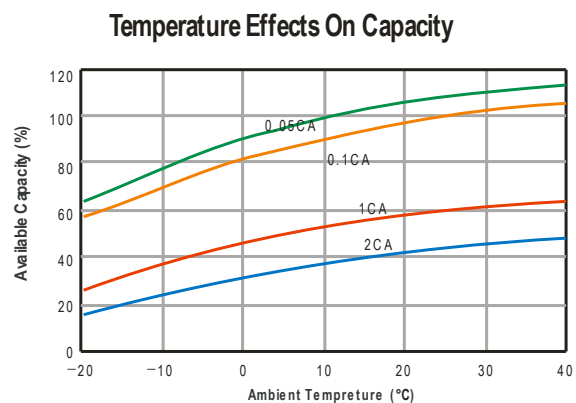
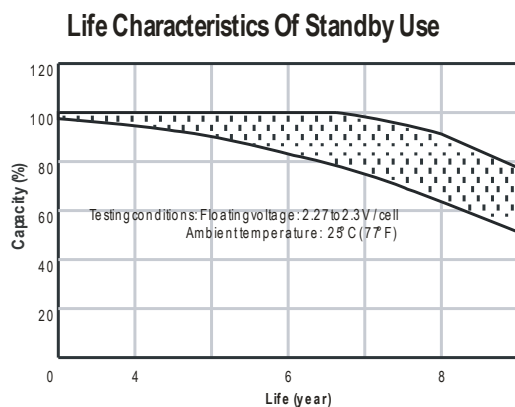
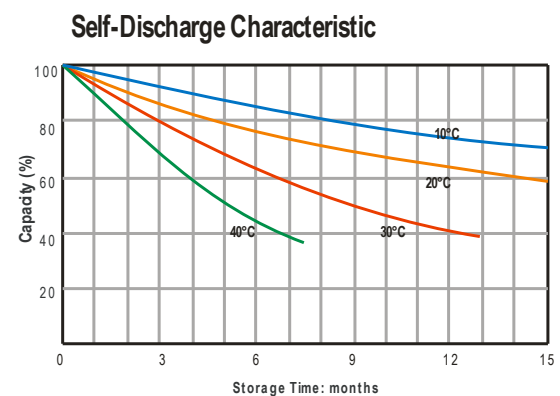
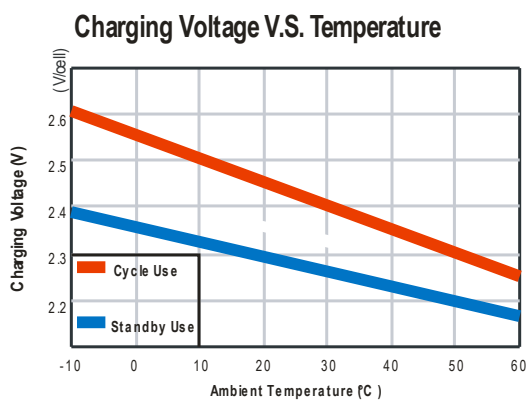
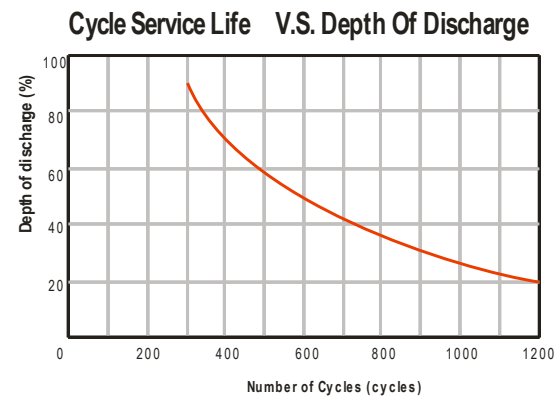
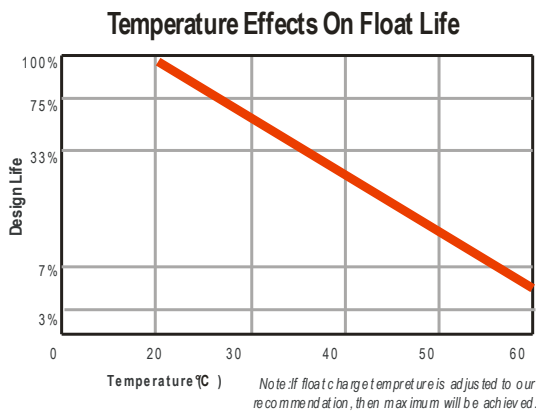
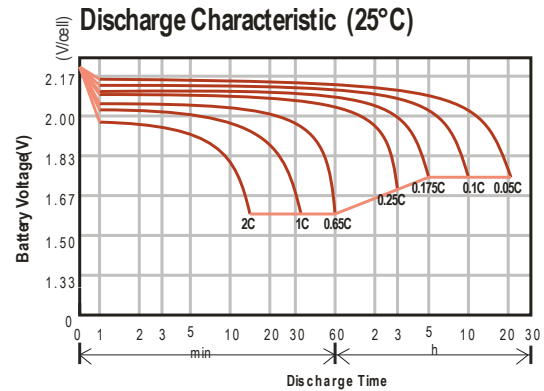
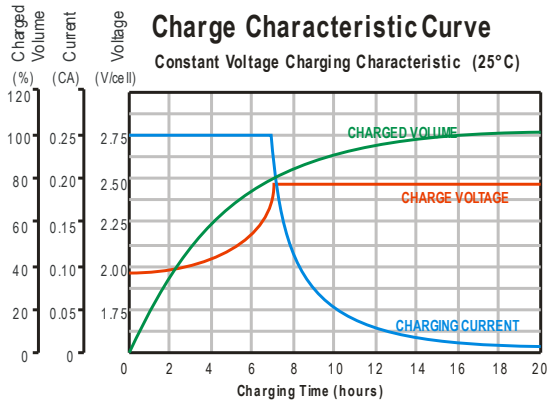
Subject to revision without notice. Please contact our sales representatives for latest version.

Web: [www.genergybattery.com](http://www.genergybattery.com) | Email: [sales@genergybattery.com](mailto:sales@genergybattery.com)

# NM12-50

**12V50Ah / 10hr rate****BATTERY**  
**Genenergy**

## Graphs



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

Web: [www.genenergybattery.com](http://www.genenergybattery.com) | Email: [sales@genenergybattery.com](mailto:sales@genenergybattery.com)