

# NF12-80

**12V80Ah / 10hr rate****BATTERY**  
**Genergy**

## Introduction

**Genergy NF (Front Terminal) series** is designed for telecommunication UPS/EPS system with 12-year design life in float service. The battery is featured of high consistency, excellent performance and reliable standby service life.

## Battery Features

- ☐ Compactness
- ☐ ETSI 19 inch / 23 inch integration
- ☐ Rackable standard component
- ☐ High power to volume ratio
- ☐ Modularity
- ☐ Long life
- ☐ Front connection and terminal access
- ☐ Central gassing system and hinged front covers on all models
- ☐ Fully tank formed plates
- ☐ Low impurity electrolyte
- ☐ Multi-position usage
- ☐ Spill proof / leak proof
- ☐ ABS case and cover VO upon request
- ☐ Very high purity lead

## Electrical Specification

Design floating Life @ 25°C (77°F) ..... 12 years

Nominal Capacity @ 25°C /77°F

20 hour rate 4.23A to 1.75Vpc ..... 84 Ah

10 hour rate 8.07A to 1.75Vpc ..... 80 Ah

Internal Resistance

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

Max. Discharge Current @ 25°C /77°F ..... 640 A (5S)

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

Cycle Use ..... 14.7 ~ 14.9V

Max. Current ..... 24 A

Standby Use ..... 13.6 - 13.8V

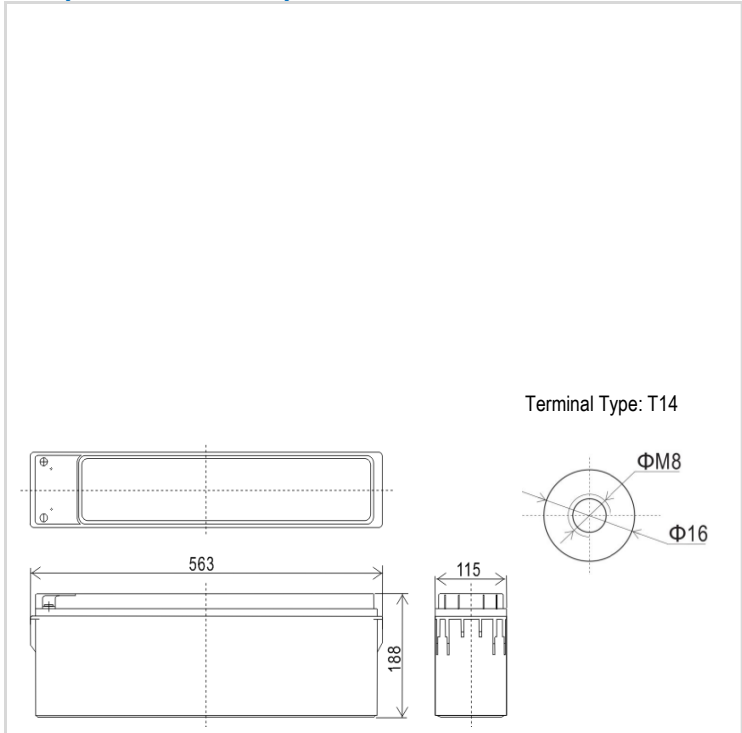
Operating Temperature Range ..... -30 ~ 50°C

*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 |               |
| 563 mm    | 115 mm            | 188 mm   | 188 mm       | 27.3 kg       |
| 22.2 inch | 4.5 inch          | 7.4 inch | 7.4 inch     | 60.2 lbs      |

## Typical Applications

- ☐ Telecommunications
- ☐ Data Center
- ☐ Power Utility
- ☐ UPS & EPS

## 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   | 212.3 | 162.1 | 141.0 | 119.9 | 92.9  | 79.0  | 72.1  | 65.4  | 60.3  | 56.4  | 50.6 | 34.34 | 24.07 | 19.08 | 15.73 | 8.22 | 4.31 |
| 1.65   | 202.0 | 154.2 | 134.9 | 115.7 | 90.8  | 77.1  | 70.4  | 63.9  | 59.0  | 55.2  | 49.7 | 33.65 | 23.68 | 18.72 | 15.41 | 8.22 | 4.31 |
| 1.70   | 189.5 | 144.7 | 127.6 | 110.4 | 88.0  | 74.7  | 68.3  | 62.1  | 57.5  | 54.0  | 48.8 | 32.96 | 23.20 | 18.33 | 15.10 | 8.14 | 4.27 |
| 1.75   | 177.1 | 135.2 | 120.2 | 105.2 | 85.1  | 72.2  | 66.2  | 60.3  | 55.9  | 52.8  | 47.9 | 32.27 | 22.73 | 17.93 | 14.78 | 8.06 | 4.23 |
| 1.80   | 163.6 | 124.9 | 112.0 | 99.1  | 81.6  | 69.2  | 63.6  | 58.0  | 54.1  | 51.3  | 46.8 | 31.49 | 22.25 | 17.50 | 14.38 | 7.91 | 4.15 |

## 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   | 355.3 | 271.3 | 239.1 | 206.9 | 159.7 | 140.9 | 129.9 | 119.2 | 109.4 | 100.7 | 90.6 | 62.37 | 44.75 | 36.09 | 29.82 | 15.74 | 8.33 |
| 1.65   | 345.6 | 263.8 | 232.0 | 200.2 | 154.0 | 135.9 | 125.4 | 115.2 | 105.9 | 97.6  | 88.2 | 60.53 | 44.36 | 35.77 | 29.58 | 15.61 | 8.26 |
| 1.70   | 333.0 | 254.2 | 223.5 | 192.8 | 148.3 | 131.0 | 121.2 | 111.6 | 102.9 | 95.1  | 86.3 | 59.15 | 43.96 | 35.45 | 29.35 | 15.48 | 8.19 |
| 1.75   | 319.3 | 243.8 | 214.4 | 185.1 | 142.6 | 126.0 | 116.7 | 107.6 | 99.4  | 92.1  | 83.9 | 57.31 | 43.49 | 35.10 | 29.11 | 15.35 | 8.12 |
| 1.80   | 303.7 | 231.9 | 203.9 | 175.9 | 135.5 | 119.9 | 111.3 | 102.9 | 95.4  | 88.9  | 81.4 | 55.47 | 43.09 | 34.78 | 28.87 | 15.23 | 8.06 |

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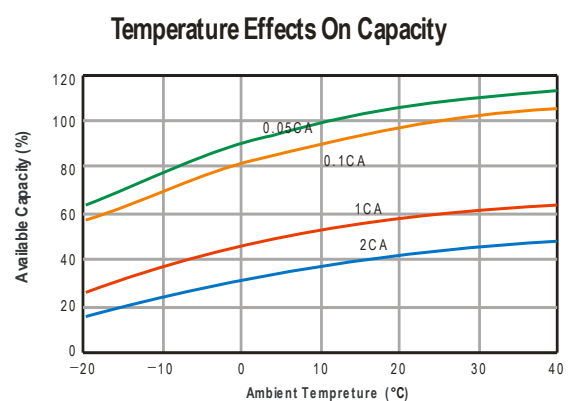
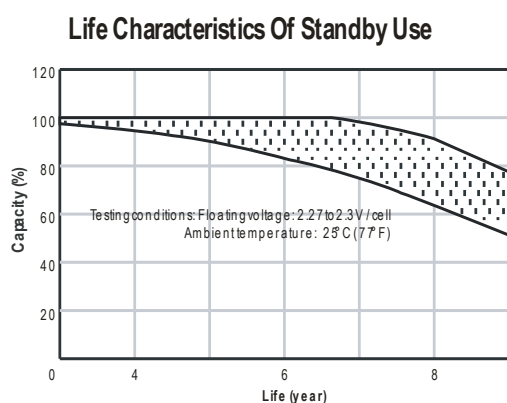
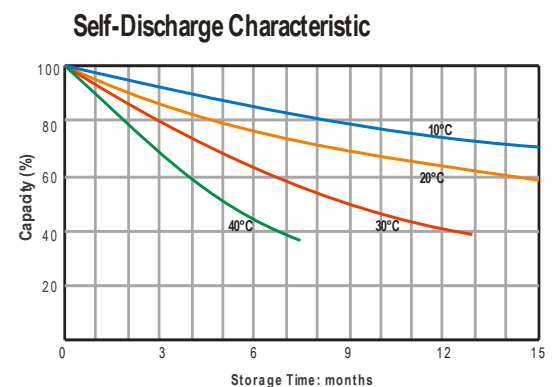
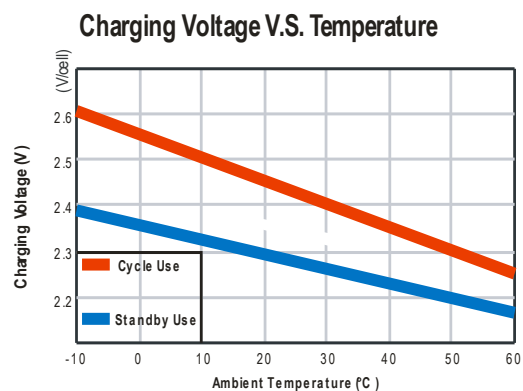
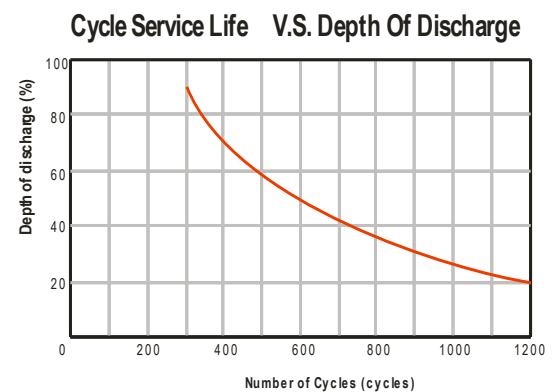
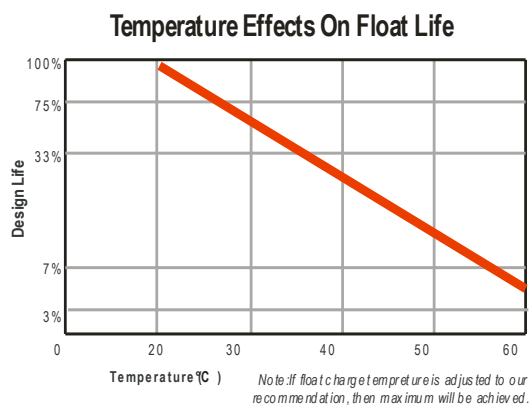
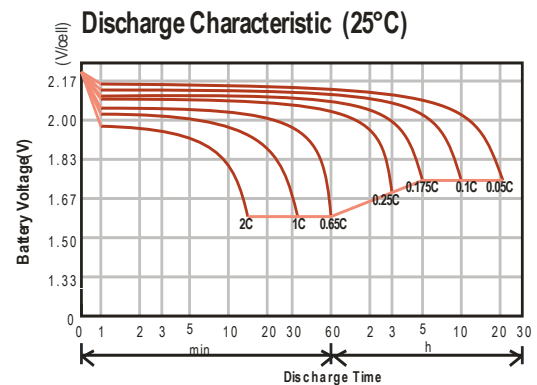
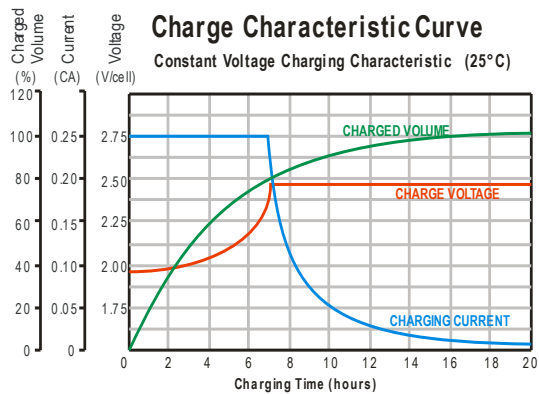
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## Graphs



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