

# NS12-24S

**12V24Ah / 20hr rate****BATTERY**  
**Genergy**

## Introduction

**Genergy NS UPS (4.5Ah-28Ah) series** is designed for standby use with 5-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 UPS/EPS, medical equipment, emergency light and security system.

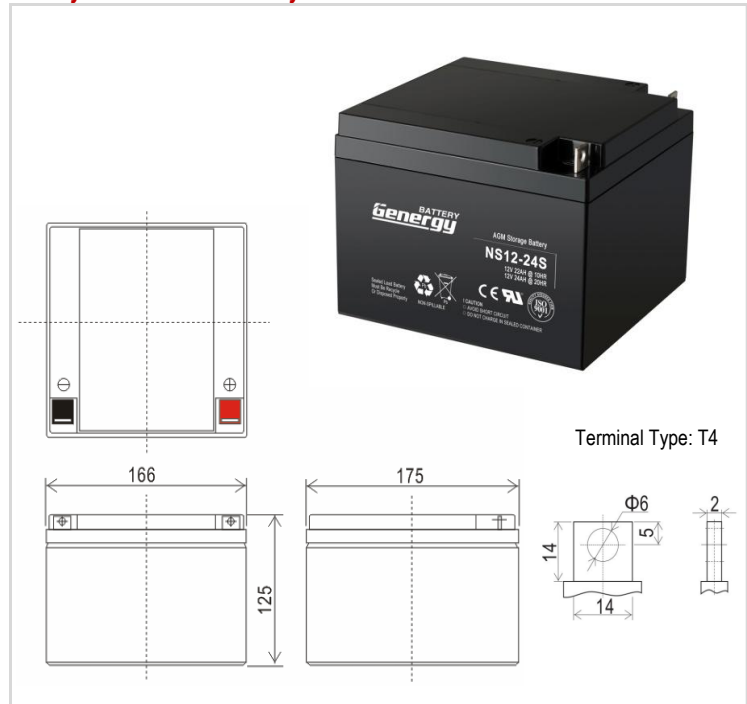
## Battery Features

- 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 @ 25°C (77°F) .....                                 | 5 years      |
| Nominal Capacity @ 25°C /77°F                                            |              |
| 20 hour rate 1.2A to 1.75Vpc .....                                       | 24 Ah        |
| 10 hour rate 2.27A to 1.75Vpc .....                                      | 22.7 Ah      |
| Internal Resistance                                                      |              |
| (Fully charged battery @ 25°C /77°F ) .....                              | 12 mΩ        |
| Max. Discharge Current @ 25°C /77°F .....                                | 360 A (5S)   |
| Charge Methods: Constant voltage charge @ 25°C /77°F                     |              |
| Cycle Use .....                                                          | 14.7 ~ 14.9V |
| Max. Current .....                                                       | 5.7 A        |
| Standby Use .....                                                        | 13.6 - 13.8V |
| Operating Temperature Range .....                                        | -30 ~ 50°C   |
| <i>Notes: battery voltage must be adjusted according to temperature.</i> |              |
| <i>Please refer to our recommendation.</i>                               |              |
| 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 |               |
| 166 mm   | 175 mm            | 125 mm   | 125 mm       | 7.6 kg        |
| 6.5 inch | 6.9 inch          | 4.9 inch | 4.9 inch     | 16.8 lbs      |

## Typical Applications

- UPS & EPS
- Security Power Supply
- Power Utility
- Electrical Toys

## 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   | 61.62 | 47.04 | 40.91 | 34.78 | 29.85 | 26.47 | 24.29 | 22.11 | 20.32 | 19.04 | 18.06 | 9.30 | 6.40 | 5.02 | 4.33 | 2.37 | 1.24 |
| 1.65   | 59.01 | 45.05 | 39.22 | 33.40 | 28.77 | 25.51 | 23.45 | 21.39 | 19.73 | 18.56 | 17.70 | 9.09 | 6.25 | 4.91 | 4.26 | 2.34 | 1.24 |
| 1.70   | 56.41 | 43.06 | 37.53 | 32.00 | 27.66 | 24.53 | 22.59 | 20.65 | 19.11 | 18.08 | 17.34 | 8.88 | 6.13 | 4.81 | 4.19 | 2.30 | 1.20 |
| 1.75   | 53.81 | 41.07 | 35.86 | 30.64 | 26.63 | 23.60 | 21.78 | 19.95 | 18.53 | 17.60 | 16.98 | 8.67 | 5.95 | 4.69 | 4.13 | 2.27 | 1.20 |
| 1.80   | 51.20 | 39.09 | 34.21 | 29.33 | 25.66 | 22.73 | 21.01 | 19.29 | 17.96 | 17.14 | 16.62 | 8.46 | 5.77 | 4.56 | 4.06 | 2.23 | 1.17 |

## 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   | 118.03 | 90.10 | 77.97 | 65.84 | 56.62 | 50.07 | 46.43 | 42.78 | 39.84 | 37.69 | 35.85 | 18.72 | 12.94 | 10.07 | 7.91 | 4.81 | 2.62 |
| 1.65   | 113.25 | 86.45 | 74.82 | 63.20 | 54.47 | 48.04 | 44.51 | 40.98 | 38.16 | 36.13 | 34.40 | 17.88 | 12.63 | 9.85  | 7.77 | 4.77 | 2.55 |
| 1.70   | 108.48 | 82.81 | 71.80 | 60.79 | 52.68 | 46.31 | 42.84 | 39.37 | 36.60 | 34.63 | 32.95 | 17.03 | 12.32 | 9.63  | 7.63 | 4.72 | 2.50 |
| 1.75   | 104.58 | 79.83 | 69.10 | 58.36 | 50.53 | 44.27 | 40.92 | 37.57 | 34.91 | 33.06 | 31.51 | 16.19 | 11.98 | 9.39  | 7.50 | 4.66 | 2.49 |
| 1.80   | 99.80  | 76.19 | 66.07 | 55.95 | 48.74 | 42.61 | 39.38 | 36.15 | 33.62 | 31.89 | 30.46 | 15.58 | 11.60 | 9.09  | 7.29 | 4.60 | 2.36 |

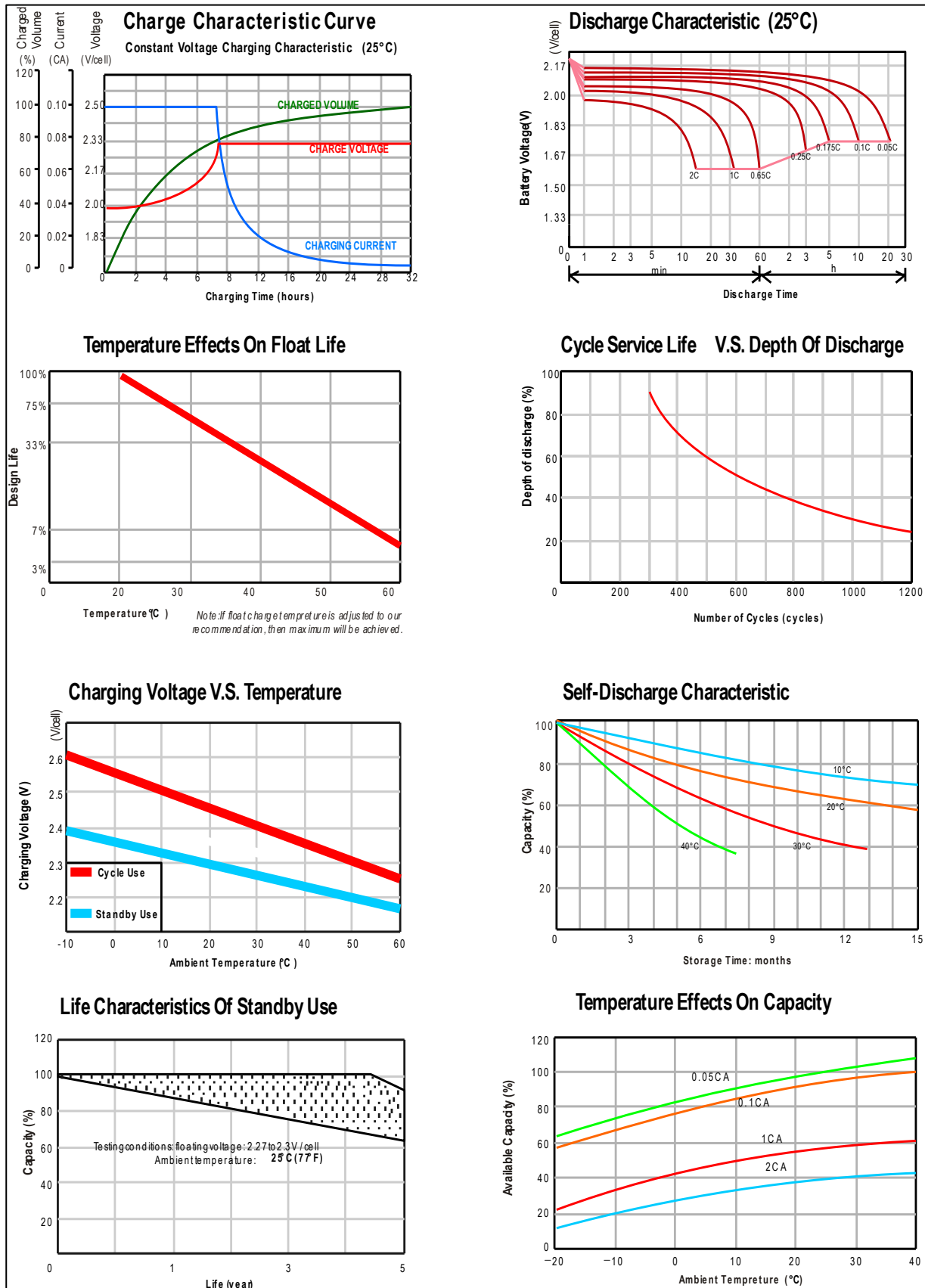
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Web: [www.genergybattery.com](http://www.genergybattery.com) | Email: [sales@genergybattery.com](mailto:sales@genergybattery.com)

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## Graphs



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