

# NS12-18

**12V18Ah / 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.

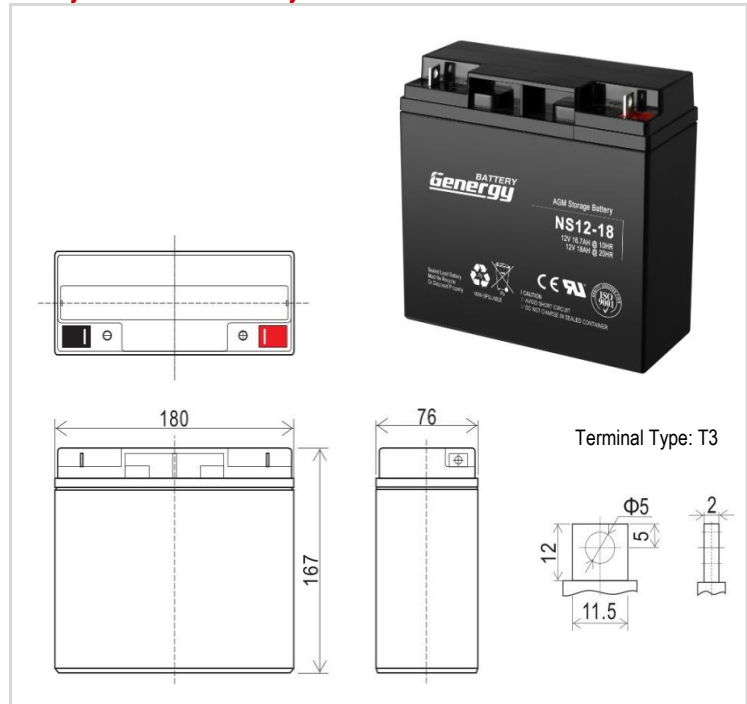
## Battery Features

- 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 0.90A to 1.75Vpc .....                                      | 18 Ah        |
| 10 hour rate 1.70A to 1.75Vpc .....                                      | 17 Ah        |
| Internal Resistance                                                      |              |
| (Fully charged battery @ 25°C /77°F ) .....                              | 12 mΩ        |
| Max. Discharge Current @ 25°C /77°F .....                                | 270 A (5S)   |
| Charge Methods: Constant voltage charge @ 25°C /77°F                     |              |
| Cycle Use .....                                                          | 14.7 ~ 14.9V |
| Max. Current .....                                                       | 4.3 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 |               |
| 180 mm   | 76 mm             | 167 mm   | 167 mm       | 5.6 kg        |
| 7.1 inch | 3.0 inch          | 6.6 inch | 6.6 inch     | 12.3 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   | 49.97 | 38.15 | 32.60 | 27.04 | 22.74 | 19.86 | 18.22 | 16.58 | 15.20 | 14.01 | 13.18 | 6.79 | 4.83 | 3.76 | 3.25 | 1.78 | 0.93 |
| 1.65   | 47.86 | 36.54 | 31.25 | 25.97 | 21.94 | 19.14 | 17.59 | 16.04 | 14.75 | 13.65 | 12.90 | 6.63 | 4.71 | 3.68 | 3.20 | 1.75 | 0.93 |
| 1.70   | 45.75 | 34.92 | 29.90 | 24.88 | 21.10 | 18.40 | 16.95 | 15.49 | 14.29 | 13.29 | 12.63 | 6.47 | 4.62 | 3.61 | 3.15 | 1.73 | 0.90 |
| 1.75   | 43.64 | 33.31 | 28.57 | 23.82 | 20.32 | 17.70 | 16.34 | 14.97 | 13.85 | 12.93 | 12.36 | 6.31 | 4.49 | 3.52 | 3.10 | 1.70 | 0.90 |
| 1.80   | 41.53 | 31.70 | 27.25 | 22.80 | 19.60 | 17.06 | 15.76 | 14.47 | 13.43 | 12.58 | 12.09 | 6.16 | 4.35 | 3.42 | 3.04 | 1.68 | 0.88 |

## 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   | 95.72 | 73.07 | 62.15 | 51.22 | 43.10 | 37.56 | 34.83 | 32.10 | 29.86 | 28.08 | 26.69 | 13.89 | 9.58 | 7.56 | 5.93 | 3.61 | 1.96 |
| 1.65   | 91.85 | 70.12 | 59.64 | 49.16 | 41.48 | 36.04 | 33.39 | 30.75 | 28.60 | 26.90 | 25.61 | 13.26 | 9.35 | 7.39 | 5.83 | 3.57 | 1.91 |
| 1.70   | 87.98 | 67.16 | 57.22 | 47.28 | 40.14 | 34.74 | 32.13 | 29.53 | 27.43 | 25.77 | 24.52 | 12.63 | 9.12 | 7.22 | 5.73 | 3.54 | 1.88 |
| 1.75   | 84.81 | 64.74 | 55.07 | 45.40 | 38.53 | 33.21 | 30.70 | 28.18 | 26.17 | 24.60 | 23.44 | 12.00 | 8.86 | 7.04 | 5.62 | 3.50 | 1.87 |
| 1.80   | 80.94 | 61.79 | 52.65 | 43.52 | 37.19 | 31.96 | 29.54 | 27.12 | 25.19 | 23.72 | 22.65 | 11.54 | 8.58 | 6.82 | 5.47 | 3.45 | 1.77 |

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

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## Graphs

