

# NS12-28S

**12V28Ah / 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.

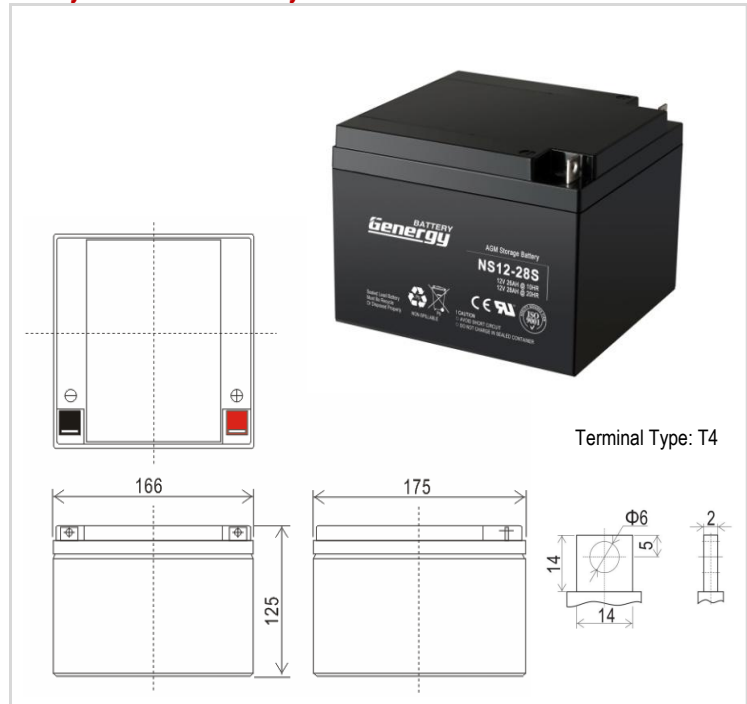
## Battery Features

- 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 1.4A to 1.75Vpc .....                                       | 28 Ah        |
| 10 hour rate 2.65A to 1.75Vpc .....                                      | 26.5 Ah      |
| Internal Resistance  |              |
| (Fully charged battery @ 25°C /77°F ) .....                              | 10 mΩ        |
| Max. Discharge Current @ 25°C /77°F .....                                | 420 A (5S)   |
| Charge Methods: Constant voltage charge @ 25°C /77°F                     |              |
| Cycle Use .....  | 14.7 ~ 14.9V |
| Max. Current .....   | 6.7 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       | 8.3 kg        |
| 6.5 inch | 6.9 inch          | 4.9 inch | 4.9 inch     | 18.3 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   | 71.86 | 54.86 | 47.71 | 40.56 | 34.61 | 30.87 | 28.33 | 25.78 | 23.64 | 21.99 | 20.65 | 10.75 | 7.45 | 5.85 | 5.05 | 2.77 | 1.44 |
| 1.65   | 68.83 | 52.54 | 45.75 | 38.95 | 33.36 | 29.75 | 27.35 | 24.94 | 22.94 | 21.43 | 20.23 | 10.51 | 7.27 | 5.72 | 4.97 | 2.73 | 1.44 |
| 1.70   | 65.79 | 50.22 | 43.77 | 37.32 | 32.06 | 28.60 | 26.35 | 24.09 | 22.23 | 20.87 | 19.81 | 10.26 | 7.13 | 5.61 | 4.89 | 2.69 | 1.40 |
| 1.75   | 62.75 | 47.90 | 41.82 | 35.74 | 30.85 | 27.53 | 25.40 | 23.27 | 21.54 | 20.31 | 19.38 | 10.02 | 6.92 | 5.47 | 4.81 | 2.65 | 1.40 |
| 1.80   | 59.72 | 45.59 | 39.90 | 34.21 | 29.73 | 26.52 | 24.50 | 22.49 | 20.88 | 19.77 | 18.96 | 9.77  | 6.71 | 5.32 | 4.73 | 2.61 | 1.36 |

## 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   | 137.65 | 105.08 | 90.93 | 76.79 | 65.75 | 58.40 | 54.15 | 49.90 | 46.35 | 43.50 | 41.15 | 21.50 | 14.98 | 11.75 | 9.22 | 5.61 | 3.05 |
| 1.65   | 132.09 | 100.83 | 87.27 | 73.70 | 63.24 | 56.03 | 51.91 | 47.80 | 44.39 | 41.67 | 39.46 | 20.52 | 14.62 | 11.49 | 9.06 | 5.56 | 2.98 |
| 1.70   | 126.52 | 96.58  | 83.74 | 70.90 | 61.15 | 54.01 | 49.96 | 45.91 | 42.56 | 39.92 | 37.77 | 19.53 | 14.25 | 11.23 | 8.90 | 5.50 | 2.92 |
| 1.75   | 121.96 | 93.10  | 80.58 | 68.07 | 58.65 | 51.64 | 47.73 | 43.81 | 40.60 | 38.09 | 36.08 | 18.55 | 13.85 | 10.95 | 8.74 | 5.44 | 2.91 |
| 1.80   | 116.40 | 88.85  | 77.06 | 65.26 | 56.56 | 49.69 | 45.93 | 42.16 | 39.09 | 36.72 | 34.86 | 17.84 | 13.41 | 10.61 | 8.50 | 5.37 | 2.75 |

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

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## Graphs

