

NM12-35

12V 35Ah / 10hr rate



Introduction

Samson NM 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.

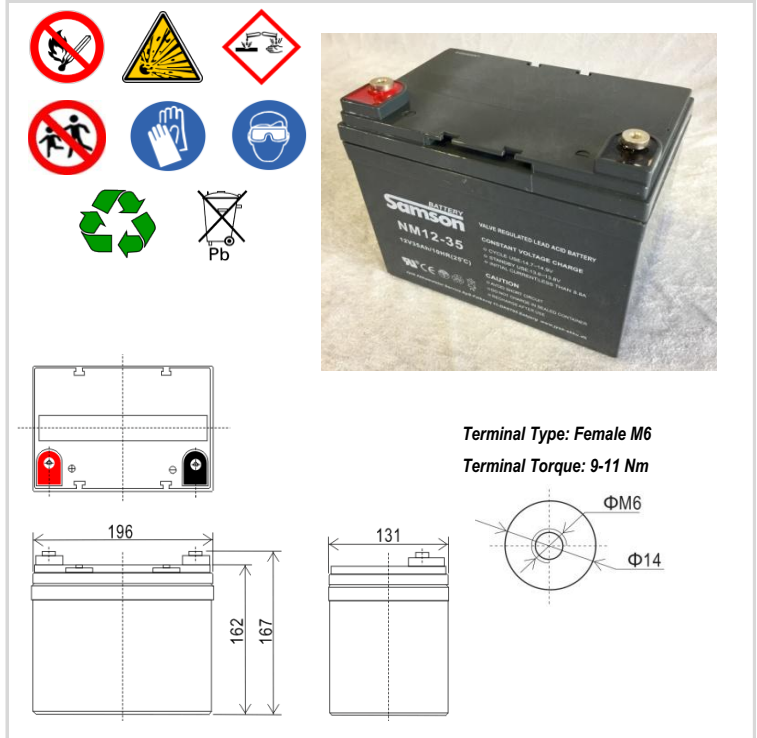
Battery Features

- 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) | 10 years |
| Design Life Cycles @ 50% D.O.D. (25°C) | 550 Cycles |
| Nominal Capacity @ 25°C /77°F | |
| 20 hour rate 1.8A to 1.75Vpc | 36 Ah |
| 10 hour rate 3.51A to 1.75Vpc | 35.1 Ah |
| Internal Resistance | |
| (Fully charged battery @ 25°C /77°F) | 8mΩ |
| Max. Discharge Current @ 25°C /77°F | 350 A (5S) |
| Short Circuit Current | 600 A |
| Charge Methods: Constant voltage charge @ 25°C /77°F | |
| Cycle Use | 14.7 ~ 14.9V |
| Max. Current | 8.8 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 | |
| 196 mm | 131 mm | 162 mm | 167 mm | 10,45 kg |
| 7,7 inch | 5,2 inch | 6,4 inch | 6,6 inch | 23,0 lbs |

Certificates



Other relevant information

Contry of origin: **China** HS Code (harmonized system code): **85 07 10 00**
 UN-Transport declaration: **UN2800** Customs tariff number **8507 10 20 80**

Typical Applications

- Telecommunications ○ Power Utility ○ Data Center ○ 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 | 83,55 | 63,78 | 55,10 | 46,42 | 39,29 | 35,39 | 33,00 | 30,61 | 28,62 | 26,95 | 25,68 | 13,92 | 9,91 | 8,23 | 6,73 | 3,59 | 1,82 |
| 1,65 | 79,34 | 60,56 | 52,60 | 44,64 | 38,23 | 34,45 | 32,18 | 29,91 | 28,04 | 26,49 | 25,33 | 13,65 | 9,72 | 8,05 | 6,57 | 3,58 | 1,82 |
| 1,70 | 76,06 | 58,06 | 50,53 | 42,99 | 37,01 | 33,31 | 31,13 | 28,95 | 27,17 | 25,70 | 24,63 | 13,19 | 9,49 | 7,86 | 6,42 | 3,54 | 1,82 |
| 1,75 | 72,55 | 55,38 | 48,27 | 41,16 | 35,60 | 32,05 | 30,02 | 27,98 | 26,35 | 25,03 | 24,11 | 12,83 | 9,29 | 7,69 | 6,28 | 3,51 | 1,80 |
| 1,80 | 68,81 | 52,52 | 45,90 | 39,27 | 34,20 | 30,76 | 28,85 | 26,93 | 25,42 | 24,22 | 23,41 | 12,37 | 9,06 | 7,50 | 6,12 | 3,42 | 1,78 |

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 | 145,10 | 110,76 | 97,48 | 84,19 | 73,39 | 66,27 | 61,56 | 56,85 | 52,85 | 49,57 | 46,82 | 25,74 | 18,73 | 15,54 | 12,80 | 7,17 | 3,78 |
| 1,65 | 139,95 | 106,83 | 94,21 | 81,59 | 71,46 | 64,52 | 59,98 | 55,45 | 51,63 | 48,52 | 45,95 | 25,21 | 18,56 | 15,37 | 12,63 | 7,10 | 3,78 |
| 1,70 | 134,57 | 102,72 | 90,71 | 78,70 | 69,18 | 62,47 | 58,17 | 53,88 | 50,29 | 47,42 | 45,07 | 24,61 | 18,21 | 15,10 | 12,44 | 6,96 | 3,73 |
| 1,75 | 128,72 | 98,26 | 86,92 | 75,58 | 66,72 | 60,25 | 56,19 | 52,12 | 48,77 | 46,14 | 44,03 | 23,82 | 17,69 | 14,73 | 12,21 | 6,91 | 3,66 |
| 1,80 | 122,40 | 93,43 | 82,82 | 72,21 | 64,09 | 57,85 | 54,02 | 50,20 | 47,09 | 44,68 | 42,81 | 22,98 | 17,23 | 14,36 | 11,94 | 6,84 | 3,63 |

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

NM12-35

12V 35Ah / 10hr rate



Graphs

