



# AGM BATTERY NH Series



**NH12-350W**

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

## Battery Construction

| COMPONENT    | POSITIVE PLATE | NEGATIVE PLATE | CONTAINER | COVER | SAFETY VALVE | TERMINAL    | SEPARATOR  | ELECTROLYTE   |
|--------------|----------------|----------------|-----------|-------|--------------|-------------|------------|---------------|
| Raw material | Lead dioxide   | Lead           | ABS       | ABS   | Rubber       | Copper/Plug | Fiberglass | Sulfuric acid |

## Performance Characteristics

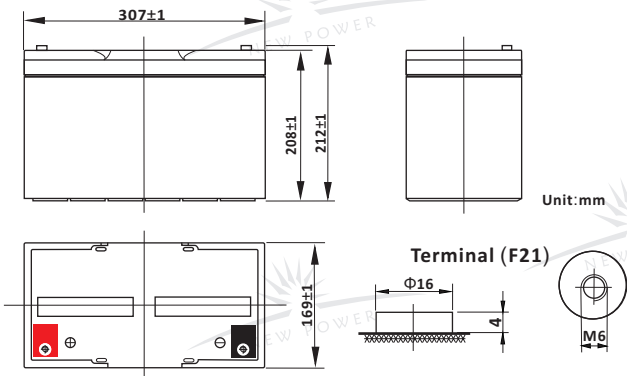
- **Nominal Voltage** ..... 12V
- **Number of Cell** ..... 6
- **Nominal Capacity (77°F / 25°C)**  
 15 min Wattage @ 1.67V ..... 350W/cell  
 10 Hour rate (9A, 10.8V) ..... 90Ah
- **Internal Resistance**  
 Fully charged battery (68°F / 20°C) ..... 4.5mΩ
- **Self-Discharge 68°F (20°C)**  
 Capacity declined per month ..... 3%
- **Max. discharge current 68°F / 20°C** ..... 900A(5S)
- **Short Circuit Current** ..... 1950A
- **Charge Methods: constant voltage charge 68°F / 20°C**  
 Cycle use ..... 14.4 ~ 14.7V  
 Max. Current ..... 22.5A  
 Standby use ..... 13.6 ~ 13.8V

## General Features

- **Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.**
- **Not restricted for air transport-complies with IATA/ICAO Special Provision A67.**
- **A recognized component of CE and UL**
- **Computer designed lead, calcium tin alloy grid for high power density.**
- **Long service life, float or cyclic applications.**
- **Maintenance-free operation.**
- **Low self discharge**
- **Design life 10 years**

## Constant Current Discharge (Amperes at 77°F/25°C)

| V/cell | 10min | 15min | 30min | 45min | 1h   | 3h   | 5h   | 10h  | 20h  |
|--------|-------|-------|-------|-------|------|------|------|------|------|
| 1.60   | 259   | 207   | 125   | 92.0  | 67.0 | 27.2 | 17.4 | 9.40 | 4.90 |
| 1.65   | 250   | 200   | 122   | 89.5  | 65.5 | 26.4 | 17.0 | 9.40 | 4.90 |
| 1.70   | 240   | 192   | 118   | 87.0  | 64.0 | 25.5 | 16.5 | 9.30 | 4.85 |
| 1.75   | 230   | 184   | 114   | 84.5  | 62.5 | 24.6 | 16.0 | 9.00 | 4.70 |
| 1.80   | 218   | 174   | 109   | 81.8  | 60.5 | 23.6 | 15.4 | 9.00 | 4.70 |



## Constant Power Discharge (Watts at 77°F/25°C)

| V/cell | 10min | 15min | 30min | 45min | 1h    | 3h   | 5h   | 10h  | 12h  |
|--------|-------|-------|-------|-------|-------|------|------|------|------|
| 1.60   | 464   | 374   | 229.0 | 166.0 | 130.0 | 51.2 | 34.2 | 19.8 | 17.1 |
| 1.65   | 448   | 361   | 223.0 | 162.0 | 127.0 | 50.0 | 33.4 | 19.6 | 16.9 |
| 1.67   | 440   | 355   | 220.0 | 160.0 | 125.0 | 49.5 | 33.0 | 19.5 | 16.8 |
| 1.70   | 430   | 348   | 216.5 | 157.5 | 124.0 | 48.8 | 32.5 | 19.3 | 16.7 |
| 1.75   | 412   | 334   | 210.0 | 152.0 | 121.0 | 47.6 | 31.6 | 19.0 | 16.5 |
| 1.80   | 393   | 320   | 203.0 | 146.0 | 117.0 | 46.3 | 30.7 | 18.7 | 16.2 |

## Dimensions and Weight

| Type                 | Length   | Width    | Height   | Total Height | Approx. Weight |
|----------------------|----------|----------|----------|--------------|----------------|
| <b>SI Units</b>      | 307mm    | 169mm    | 208mm    | 212mm        | 28.5Kg         |
| <b>English Units</b> | 12.1inch | 6.65inch | 8.19inch | 8.35inch     | 62.8lbs        |

(Note: The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.)



