



# AGM BATTERY NL Series

**NL2-1500 (2V 1500AH)**



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

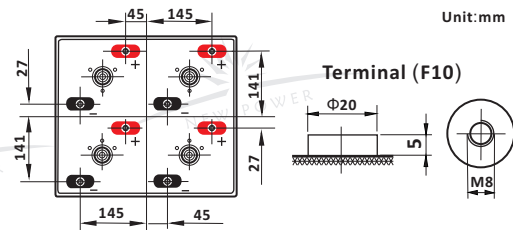
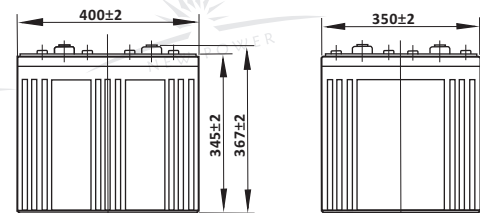
- **Nominal Voltage** ..... 2V
- **Number of Cell** ..... 1
- **Nominal Capacity (77°F /25°C)**
  - 10 Hour rate (150A, 1.8V) ..... 1500Ah
  - 5 Hour rate (268A, 1.75V) ..... 1340Ah
  - 3 Hour rate (378A, 1.70V) ..... 1134Ah
  - 1 Hour rate (920A, 1.60V)..... 920Ah
- **Internal Resistance**
  - Fully charged battery (77°F /25°C) ..... 0.11mΩ
- **Capacity affected by temperature (20 hour rate)**
  - 104°F (40°C) ..... 102%    32°F (10°C) ..... 85%
  - 77°F (25°C) ..... 100%    5°F (-15°C) ..... 65%
- **Self-Discharge 68°F (20°C)**
  - Capacity after 3 month storage ..... 90%
  - Capacity after 6 month storage ..... 80%
  - Capacity after 12 month storage ..... 60%
- **Max. discharge current 77°F /25°C** ..... 3000A(5S)
- **Charge Methods: constant voltage charge 77°F /25°C**
  - Cycle use ..... 2.35 ~ 2.45V
  - Max. Current ..... 300A
  - Standby use ..... 2.25 ~ 2.30V

## 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 15 years**

## Dimensions and Weight

Type	Length	Width	Height	Total Height	Approx. Weight
SI Units	400mm	350mm	345mm	382mm	94Kg
English Units	15.75inch	13.8inch	13.6inch	15.04inch	207.2lbs



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

V/cell	10min	15min	30min	45min	1h	3h	5h	10h
1.60	2715	2040	1490	1125	920	398	286	160
1.65	2573	1942	1425	1080	892	388	280	157
1.70	2425	1840	1357	1032	862	378	274	155
1.75	2275	1735	1285	983	830	367	268	152
1.80	2120	1630	1220	931	795	355	260	150

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

V/cell	10min	15min	30min	45min	1h	2h	3h	5h
1.60	4267	3451	2495	1990	1638	975	745	526
1.65	4022	3266	2368	1899	1563	930	723	520
1.70	3772	3077	2242	1804	1491	887	701	515
1.75	3524	2887	2112	1705	1446	860	679	501
1.80	3276	2695	1979	1609	1335	794	657	492

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



