



# AGM BATTERY NL Series

**NL2-2000 (2V 2000AH)**



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

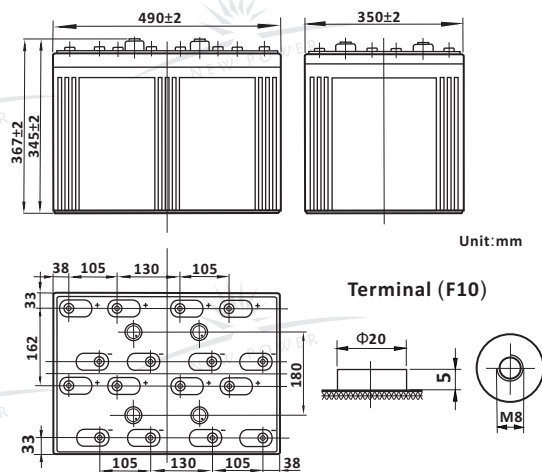
- **Nominal Voltage** ..... 2V
- **Number of Cell** ..... 1
- **Nominal Capacity (77°F /25°C)**
  - 10 Hour rate (200A, 1.8V) ..... 2000Ah
  - 5 Hour rate (358A, 1.75V) ..... 1790Ah
  - 3 Hour rate (520A, 1.70V) ..... 1560Ah
  - 1 Hour rate (1230A, 1.60V)..... 1230Ah
- **Internal Resistance**
  - Fully charged battery (77°F /25°C) ..... 0.3mΩ
- **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 ..... 400A
  - 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	490mm	350mm	345mm	382mm	123Kg
English Units	19.3inch	13.8inch	13.6inch	15.04inch	271.1lbs



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

V/cell	10min	15min	30min	45min	1h	3h	5h	10h
1.60	3620	2725	2100	1500	1230	545	384	214
1.65	3430	2295	2008	1440	1205	535	378	211
1.70	3240	2460	1910	1380	1180	520	370	208
1.75	3040	2320	1810	1310	1150	500	358	204
1.80	2830	2180	1710	1240	1120	480	345	200

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

V/cell	10min	15min	30min	45min	1h	2h	3h	5h
1.60	5754	4654	3543	2673	2206	1488	1018	706
1.65	5422	4404	3365	2551	2130	1431	1001	701
1.70	5084	4152	3185	2422	2052	1368	987	692
1.75	4750	3892	3000	2290	2023	1338	966	678
1.80	4416	3636	2812	2160	1908	1274	904	663

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



