



AGM BATTERY NL Series

NL2-3500 (2V 3500AH)



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

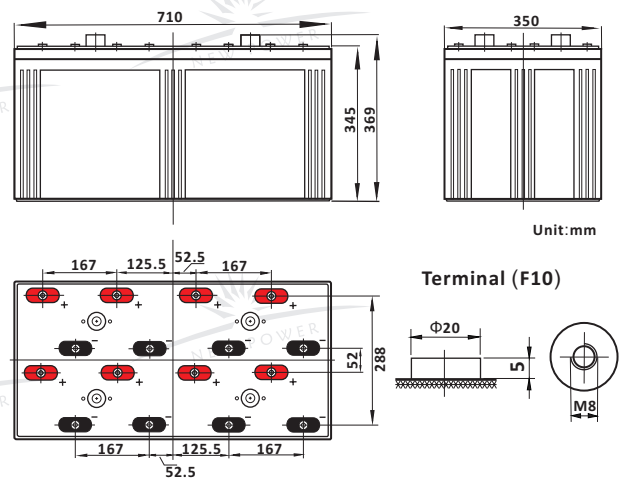
- **Nominal Voltage** 2V
- **Number of Cell** 1
- **Nominal Capacity (77°F /25°C)**
 - 10 Hour rate (350A, 1.8V) 3500Ah
 - 5 Hour rate (595A, 1.75V) 2975Ah
 - 3 Hour rate (875A, 1.70V) 2625Ah
 - 1 Hour rate (2100A, 1.60V)..... 2100Ah
- **Internal Resistance**
 - Fully charged battery (77°F /25°C) 0.18mΩ
- **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** 3500A(5S)
- **Charge Methods: constant voltage charge 77°F /25°C**
 - Cycle use 2.35 ~ 2.45V
 - Max. Current 600A
 - 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	710mm	350mm	345mm	382mm	205Kg
English Units	27.95inch	13.8inch	13.6inch	15.04inch	451.8lbs



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

V/cell	10min	15min	30min	45min	1h	3h	5h	10h
1.60	6013	4703	3486	2527	2100	937	656	373
1.65	5697	4475	3334	2424	2037	909	630	368
1.70	5376	3071	3170	2277	1975	875	612	362
1.75	5036	4001	3006	2203	1915	848	595	356
1.80	4703	3761	2837	2088	1880	820	585	350

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

V/cell	10min	15min	30min	45min	1h	2h	3h	5h
1.60	9065	7078	5246	4068	3475	2386	1665	1078
1.65	8592	6738	5014	3905	3387	2359	1620	1060
1.70	8103	6387	4782	3742	3292	2272	1575	1038
1.75	7601	6030	4551	3580	3197	2175	1523	1016
1.80	7092	5668	4319	3417	3102	2070	1483	966

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



