



AGM BATTERY NL Series

NL2-700 (2V 700AH)



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

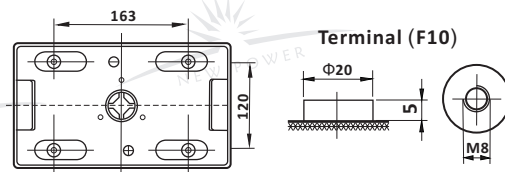
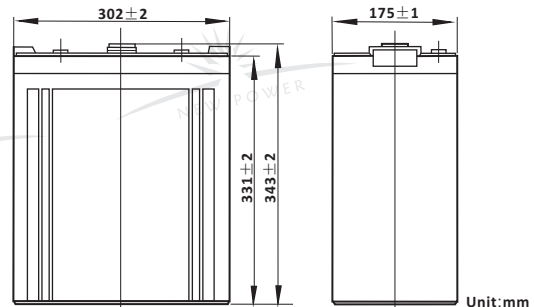
- **Nominal Voltage** 2V
- **Number of Cell** 1
- **Nominal Capacity (77°F /25°C)**
 - 10 Hour rate (70A, 1.8V) 700Ah
 - 5 Hour rate (125A, 1.75V) 625Ah
 - 3 Hour rate (185A, 1.70V) 555Ah
 - 1 Hour rate (450A, 1.60V)..... 450Ah
- **Internal Resistance**
 - Fully charged battery (77°F /25°C) 0.6mΩ
- **Capacity 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** 2000A(5S)
- **Charge Methods: constant voltage charge 77°F /25°C**
 - Cycle use 2.35 ~ 2.45V
 - Max. Current 140A
 - 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	302mm	175mm	330mm	367mm	40Kg
English Units	11.9inch	6.89inch	13.0inch	14.45inch	88.2lbs



Total height with removable cover: 367

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

V/cell	10min	15min	30min	45min	1h	3h	5h	10h
1.60	1340	1030	740	555	450	195	131	74
1.65	1275	985	710	535	435	190	129	73
1.70	1210	945	680	515	420	185	127	73
1.75	1145	900	650	495	405	180	125	72
1.80	1075	855	610	472	388	174	122	70

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

V/cell	10min	15min	30min	45min	1h	2h	3h	5h
1.60	2345	1850	1340	1020	835	560	384	252
1.65	2235	1780	1280	975	800	547	375	248
1.70	2125	1710	1220	930	765	534	365	244
1.75	2015	1640	1160	885	730	517	355	240
1.80	1905	1560	1090	835	692	485	343	235

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



