



AGM BATTERY ND Series

NM12-225D (12V 225AH)



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

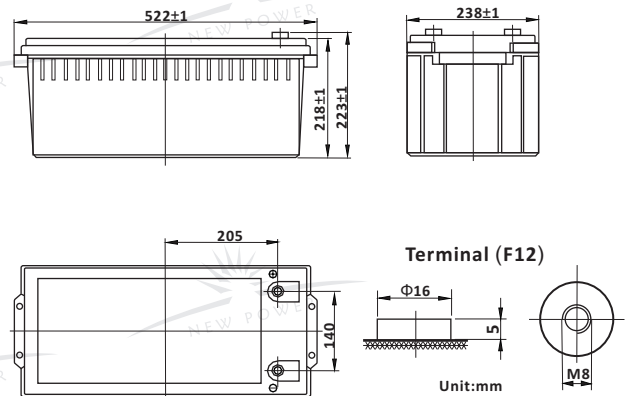
- **Nominal Voltage** 12V
- **Number of Cell** 6
- **Nominal Capacity (77°F /25°C)**
 - 20 Hour rate (11.5A, 10.8V) 230Ah
 - 10 Hour rate (22.5A, 10.8V) 225Ah
 - 5 Hour rate (39A, 10.5V) 195Ah
 - 1 Hour rate (140A, 9.6V) 140Ah
- **Internal Resistance**
 - Fully charged battery (77°F /25°C) 3.8mΩ
- **Capacity affected by temperature (10 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** 1000A(5S)
- **Charge Methods: constant voltage charge 77°F /25°C**
 - Cycle use 14.4 ~ 14.7V
 - Max. Current 56A
 - 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**

Dimensions and Weight

Type	Length	Width	Height	Total Height	Approx. Weight
SI Units	522mm	238mm	218mm	222mm	63Kg
English Units	20.55inch	9.37inch	8.58inch	8.74inch	138.9lbs



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

V/cell	10min	15min	30min	1h	3h	5h	10h	20h
1.60	470	383	230	140	58.5	40.9	23.4	11.87
1.65	442	361	220	138	58.0	40.3	23.2	11.76
1.70	416	338	213	136	57.3	39.6	23.1	11.72
1.75	388	315	205	134	56.2	39.0	22.9	11.64
1.80	358	293	197	132	54.9	38.3	22.5	11.50

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

V/cell	10min	15min	30min	45min	1h	2h	3h	5h
1.60	821	663	434	311	287	155	111	80.2
1.65	780	640	416	303	281	153	109	79.6
1.70	740	620	401	297	276	150	108	78.9
1.75	695	600	385	291	270	146	107	78.1
1.80	662	565	369	285	264	142	105	77.7

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



