

NPD62200 designed for applications that typically discharge 60 to 70% or more of the battery capacity. The battery is typically feature thick plates with high density active material. The thick battery plates allow for reserve energy to be stored deep within the battery plates and released during slow discharging such as trolling or solar applications. The high density material remains within the batteries' plate/grid structure longer, resisting the normal degradation found in cycling conditions. The battery is typically used for great extent discharge and recharged. The battery uses a different chemistry for the plates' active paste material and a slightly stronger acid. This chemistry allows for a much longer life in deep cycle applications with only a slightly reduction in maximum power output.

Specifications

Nominal voltage	= 6 V
Rated capacity (20hr/1.80V/25°C)	= 220 Ah
Total height	= 226 mm
Height	= 220 mm
Length	= 306 mm
Width	= 169 mm
Approx. Weight	= 29.5 kg
Internal resistance (fully charged@25°C@steady status)	≤ 2.8mΩ
Standard terminal	= M8
Max. discharge current in 5 sec.	= 1760A

Capacity @77°F(25°C)

20hr rate@1.80V (11.0A)	= 220Ah
10hr rate@1.80V (19.8A)	= 198Ah
5hr rate@1.70V (36.0A)	= 180Ah##

Capacity affected by temperature

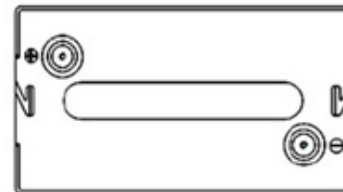
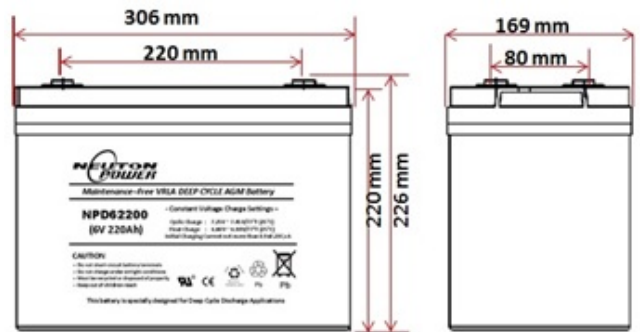
104°F (40°C)@ 20hrs rate	= 102%
77°F (25°C)@ 20hrs rate	= 100%
32°F (0°C)@ 20hrs rate	= 85%
5°F (-15°C)@20hrs rate	= 65%

Capacity remains after self-discharge

3 months	= 91%
6 months	= 82%
12months	= 64%

Reserve capacity to 10.5V at 80°F (27°C)###

@25A	= 410 mins
@75A	= 105 mins



Remarks

- ### RC (Reserve Capacity) - the number of minutes a battery can be discharged at 25 or 75 A.
- ## 5 hour rate is based on IEC (International Electro-technical Commission temperature standard of 30°C (86°F).

Constant voltage charging@77°F(25°C)

Initial charging current ≤ 0.9x0.20C_{20A}
 Boost charging voltage --- 7.20V to 7.45V
 Float charging voltage --- 6.80V to 6.90V

Application Examples

Wheelchair; Robots; Lawn mowers; Golf Trolley; Pumps; Magnetic lifts; Solar; Electric tools; automatic guide; Photovoltaic

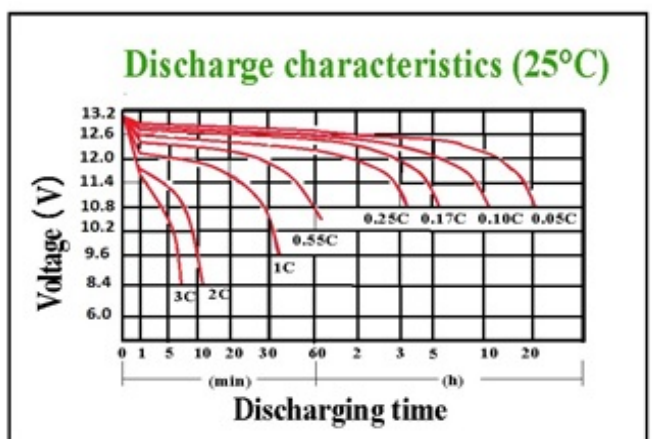
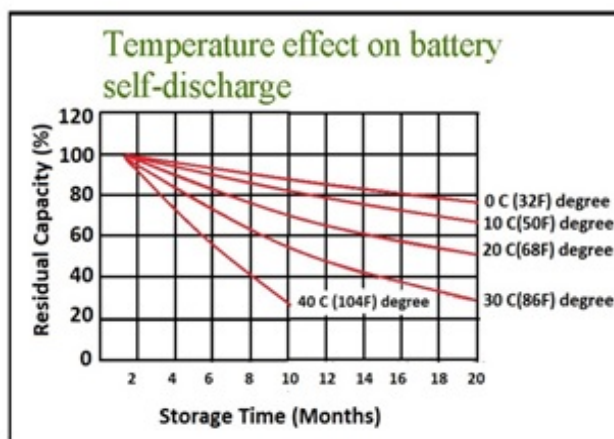
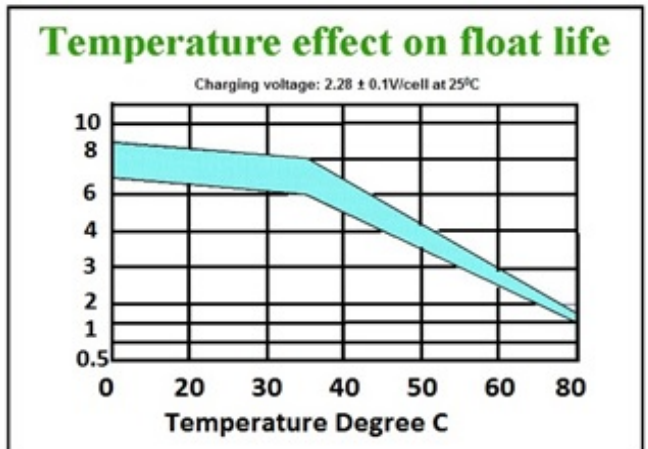
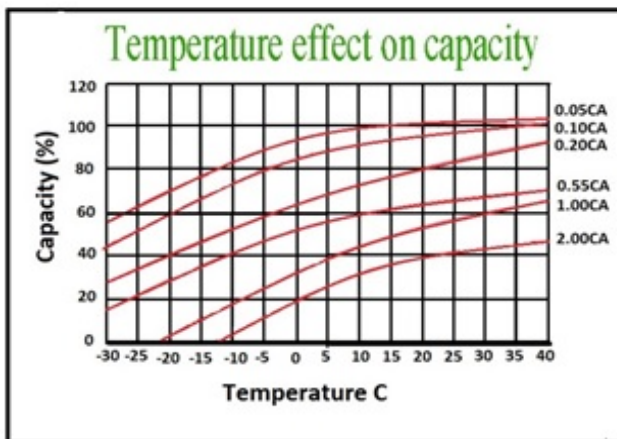
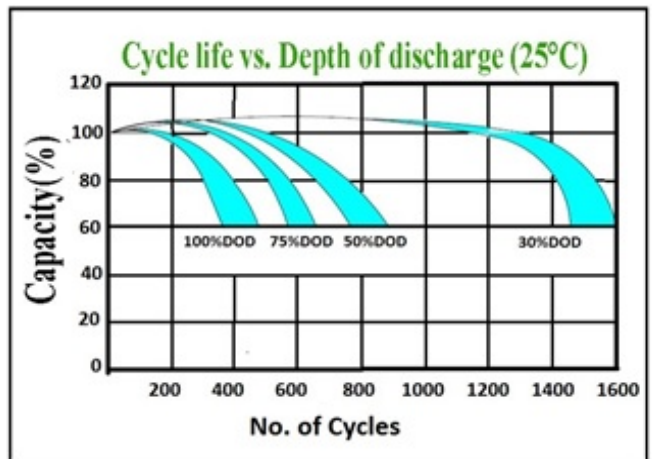
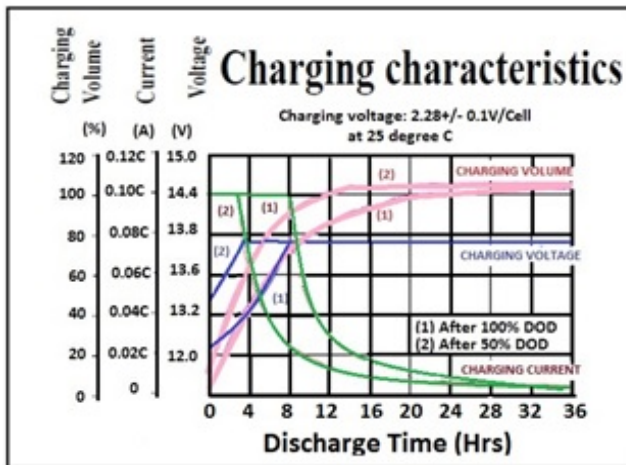
Constant Current Discharge Mean Data (ampere per cell) at 77°F (25°C)

Volt/Cell	10m	15m	30m	45m	1h	2h	3h	5h	8h	10h	20h
1.60V	332.8	283.1	180.3	133.1	122.2	77.6	54.5	37.0	24.4	21.8	12.1
1.65V	326.7	278.0	177.0	130.7	120.0	76.2	53.5	36.4	24.0	21.4	11.9
1.70V	320.7	272.8	173.7	128.3	117.8	74.7	52.5	35.7	23.6	21.0	11.7
1.75V	314.6	267.7	170.5	125.8	115.5	73.3	51.5	35.0	23.1	20.6	11.4
1.80V	302.5	257.4	163.9	121.0	111.1	70.5	49.5	33.7	22.2	19.8	11.0

Constant Power Discharge Mean Data (watt per cell) at 77°F (25°C)

Volt/Cell	10m	15m	30m	45m	1h	2h	3h	5h	8h	10h	20h
1.60V	640.5	545.0	347.1	256.2	235.3	149.3	104.8	71.3	47.1	41.9	23.3
1.65V	628.9	535.1	340.7	251.6	231.0	146.6	102.9	70.0	46.2	41.2	22.9
1.70V	617.3	525.2	334.4	246.9	226.7	143.9	101.0	68.7	45.3	40.4	22.4
1.75V	605.6	515.3	328.1	242.2	222.4	141.2	99.1	67.4	44.5	39.6	22.0
1.80V	582.3	495.5	315.5	232.9	213.9	135.7	95.3	64.8	42.8	38.1	21.2

Performance Characteristics



Battery Construction

Component	Positive Plate	Negative Plate	Container and Lid Cover	Safety Valve	Terminal Options	Separator	Electrolyte
Raw Material	Lead Dioxide	Lead	ABS or UL94 V0, Flame Retardant ABS (Option)	Si-Rubber	Inserted Type M8	Absorbed Glass Mat (AGM)	Sulfuric Acid