

NORDMAX™

NM220SOLAR (12V 220Ah)

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	200Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 59.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 3.5 mΩ
Terminal	F16(M8)/F10 (M8)
Max. Discharge Current	2000A (5 sec)
Design Life	12 years (floating charge)
Max. Charging Current	60.0 A
Reference Capacity	C3 152.9AH C5 172.3AH C10 190.5AH C20 200.0AH C100 221.9AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ±5°C
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



NM Solar series batteries provide superior high integrity and reliability. It is specially designed for frequent cyclic charge and discharging. By using strong grids, thick plate and specially active material are designed for repeated deep-discharge applications. It is suitable for solar and wind renewable energy storage, mobility and medical equipment and cable TV etc.



ISO 9001



ISO 14001



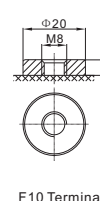
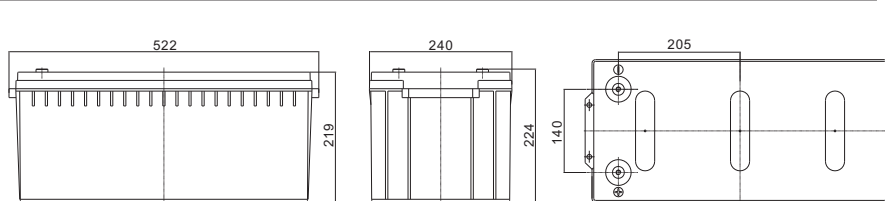
OHSAS 18001



MH 28539



Dimensions



F10 Terminal

Length	522±2mm (20.6 inches)
Width	240±2mm (9.45 inches)
Height	219±2mm (8.62 inches)
Total Height	224±2mm (8.82 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

Constant Current Discharge Characteristics : A(25°C)

F.V/Time	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR	24HR	48HR	72HR	100HR
1.60V	121.5	72.34	56.35	44.20	37.60	24.12	20.00	10.37	8.792	4.625	3.167	2.330
1.65V	117.3	69.92	54.62	42.88	36.42	23.93	19.81	10.31	8.708	4.581	3.137	2.308
1.70V	113.6	68.05	52.31	41.56	35.43	23.55	19.43	10.18	8.540	4.493	3.076	2.263
1.75V	110.0	65.44	50.96	40.42	34.45	23.17	19.24	10.00	8.457	4.449	3.046	2.241
1.80V	105.1	63.20	50.00	39.48	34.00	22.79	19.05	9.903	8.373	4.405	3.016	2.219
1.85V	93.83	57.80	46.54	37.02	31.30	21.46	17.90	9.811	7.871	4.140	2.835	2.086

Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR	24HR	48HR	72HR	100HR
1.60V	228.0	136.8	107.0	85.19	71.17	47.00	39.22	20.69	17.24	9.070	6.210	4.569
1.65V	224.1	133.1	104.3	83.11	69.24	46.62	38.85	20.51	17.08	8.983	6.151	4.526
1.70V	217.6	129.8	100.3	80.47	67.51	46.06	38.09	20.32	16.74	8.809	6.031	4.438
1.75V	211.5	125.1	97.86	78.58	65.97	45.30	37.71	19.95	16.58	8.721	5.971	4.394
1.80V	202.9	122.3	97.31	77.07	65.09	44.55	37.34	19.77	16.41	8.634	5.912	4.350
1.85V	182.2	112.6	90.77	72.53	60.20	42.11	35.26	19.58	15.50	8.155	5.583	4.108

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C₂₀ should reach 95% after the first cycle and 100% after the third cycle.

