NIMAC
Power into the Future

VRLA BATTERY | 6-GFM-200J | 12V200Ah

SLA BATTERY—GEL TECHNOLOGY SERIES

Specification

Nominal Voltage	12V
Number of cell	6
Nominal Capacity	200Ah@10hr-rate (20.0A to 1.80V/cell @25℃)
Weight	Approx.58.5Kg
Terminal	M8,Φ=18&20
Container Material	ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.
Rated Capacity	205.0Ah 20hr-rate (10.25A to 1.80V/cell @25℃) 200.0Ah 10hr-rate (20.0A to 1.80V/cell @25℃) 167.0Ah 5hr-rate (33.4A to 1.75V/cell @25℃) 122.0Ah 1hr-rate (122.0A to 1.60V/cell @25℃)
Max. Discharge Current	1000A(5sec)
Internal Resistance	Approx.2.6mΩ(Fully charged)
Operating Temp. Range	Discharge: -40 ℃~60℃ Charge : -20℃~50℃ Storage : -40℃~60℃
Cycle Use	Charging Current: ≤40.0A Voltage:14.2V ~14.4V Temperature compensation:-30mV/℃
Standby Use	Charging Current:No limit Voltage:13.6V ~13.8V Temperature compensation:-20mV/℃
Self-Discharge	less than 1% at 25℃
Design Life	15 years (floating charge)

Introduction

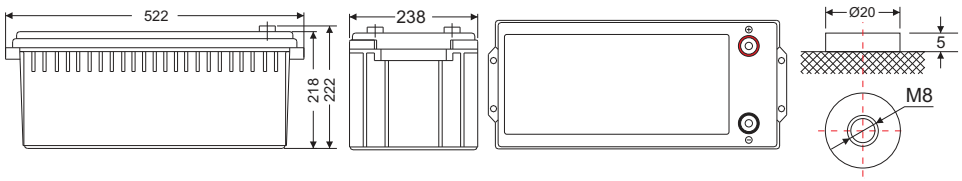
The NIMCA GEL-TECH batteries designed with 15+ years service life. The SOLID-GEL system can avoid corrosion and stratification. The special separator can properly prevent short-circuit. It can offer high deep discharge ability, super thermal stability, good recovery-ability after deep discharging. The deep discharge cycles of GEL-TECH batteries can be more than 30% compared with other normal AGM batteries.

Applications

- *Auto control system &ATM machine*
- *Electronic apparatus and equipment*
- *Emergency light & Emergency backup power supply & Alarm/Security system*
- *Power generation system (solar and wind power system,etc.)*
- *Communication power & DC power*
- *Electric Power System(EPS)*
- *Uninterruptable Power System (UPS)*
- ……

Dimensions

Length	522±1mm (20.47 inches)
Width	238±1mm (9.45 inches)
Heigth	218±1mm (8.62 inches)
Total Heigth	222±1mm (8.82 inches)



Unit: mm

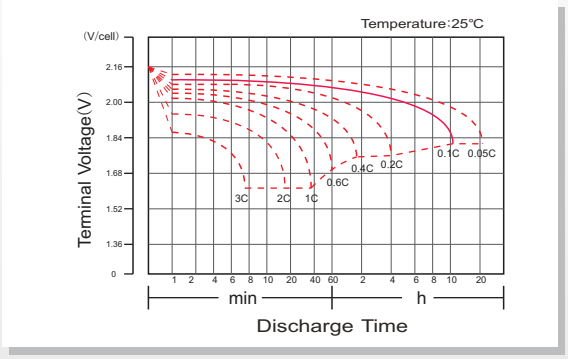
Constant Current Discharge Characteristics: A (25℃)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	662.3	474.6	345.3	216.8	122.5	69.95	49.20	40.72	34.29	24.34	20.96	11.09
1.65V/cell	644.6	451.6	338.2	213.2	122.0	69.42	49.01	40.53	34.09	24.14	20.76	10.88
1.70V/cell	607.4	435.6	332.9	211.3	120.8	68.89	48.63	40.34	33.88	23.95	20.56	10.68
1.75V/cell	545.4	402.0	317.0	206.0	119.7	68.37	48.44	39.96	33.48	23.75	20.36	10.48
1.80V/cell	492.3	366.6	292.2	197.0	116.9	67.14	47.12	39.02	32.88	23.35	20.16	10.28
1.85V/cell	428.5	327.6	262.1	184.5	111.0	64.16	45.05	37.13	31.46	22.36	19.55	9.675

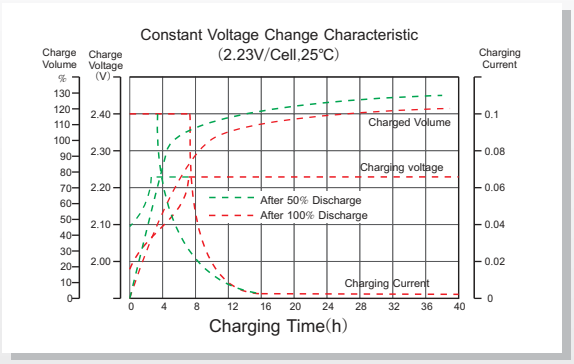
Constant Power Discharge Characteristics: W (25 ℃)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	6308	4613	3396	2446	1401	804.6	567.7	470.5	396.9	282.5	235.7	124.5
1.65V/cell	6179	4406	3326	2416	1394	801.5	566.6	469.4	394.5	281.3	233.3	123.3
1.70V/cell	5833	4259	3280	2387	1384	794.1	563.2	467.1	393.3	278.9	232.1	122.1
1.75V/cell	5252	3935	3128	2333	1371	786.8	559.8	463.7	389.7	276.5	229.7	120.9
1.80V/cell	4725	3573	2874	2227	1337	775.2	546.3	451.3	383.6	270.6	227.2	119.7
1.85V/cell	4078	3173	2566	2087	1267	739.4	519.1	429.8	364.3	261.1	220.0	114.8

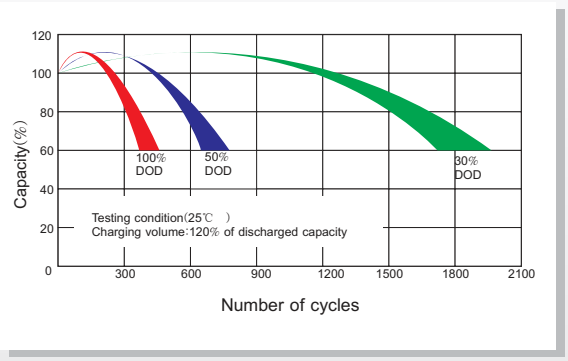
Discharge Characteristics Curve



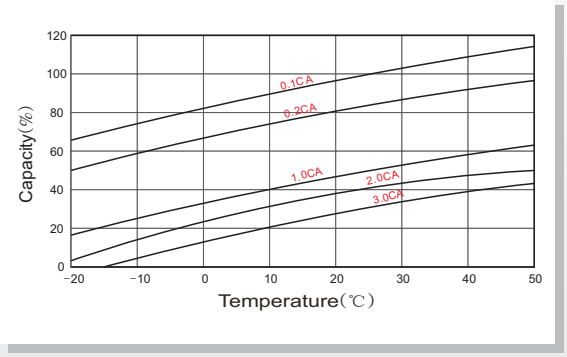
Charging Characteristics Curve



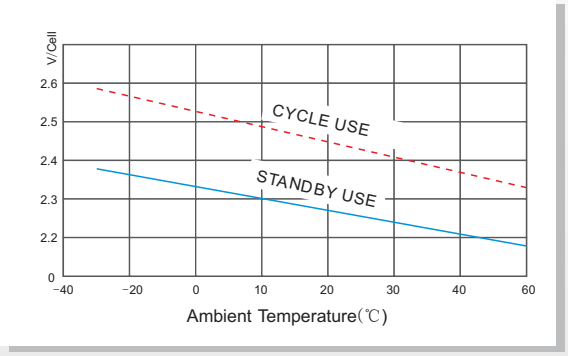
Cycle life in relation to depth of Discharge



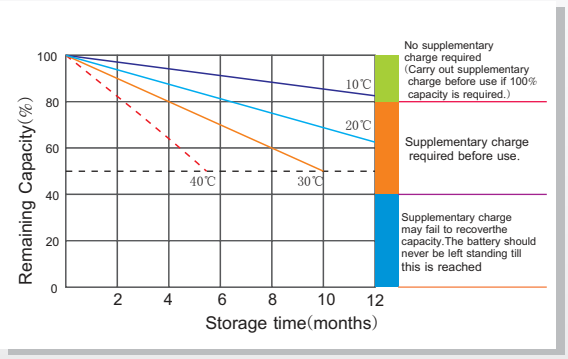
Temperature effects on Capacity



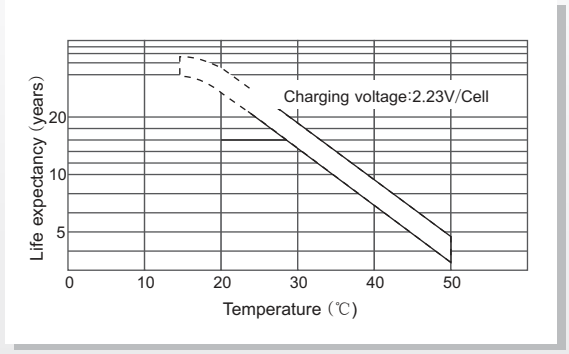
Relationship between charging voltage and temperature



Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use

