NIMAC
Power into the Future

VRLA BATTERY | 6-GFM-150J | 12V150Ah

SLA BATTERY—GEL TECHNOLOGY SERIES

Specification

Nominal Voltage	12V
Number of cell	6
Nominal Capacity	150Ah@10hr-rate (15.0A to 1.80V/cell @25℃)
Weight	Approx.42.0Kg
Terminal	M8,Φ=16&18
Container Material	ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.
Rated Capacity	154.2Ah 20hr-rate (7.71A to 1.80V/cell @25℃) 150.0Ah 10hr-rate (15.0A to 1.80V/cell @25℃) 125.5Ah 5hr-rate (25.10A to 1.75V/cell @25℃) 91.5Ah 1hr-rate (91.5A to 1.60V/cell @25℃)
Max. Discharge Current	750A(5sec)
Internal Resistance	Approx.3.4mΩ(Fully charged)
Operating Temp. Range	Discharge: -40 ℃~60℃ Charge : -20℃~50℃ Storage : -40℃~60℃
Cycle Use	Charging Current: ≤30.0A 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

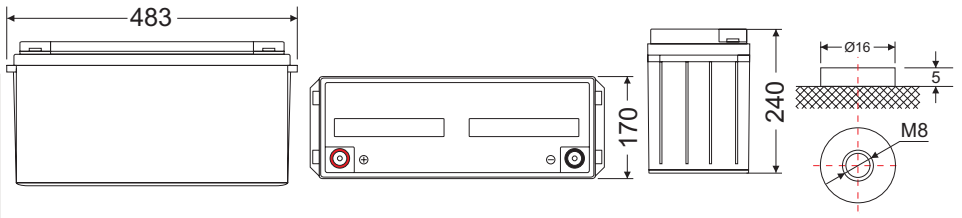
The NIMAC GEL-TECH batteries designed with 15+ years service life. The SOLID-GEL system can avoid corrosion and stratification. The special separator can properly prevent short-circuit. It can offer high deep discharge ability, super thermal stability, good recovery-ability after deep discharging. The 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	483±1mm (19.05 inches)
Width	170±1mm (6.69 inches)
Heigth	240±1mm (9.45 inches)
Total Heigth	240±1mm (9.45 inches)



Unit: mm

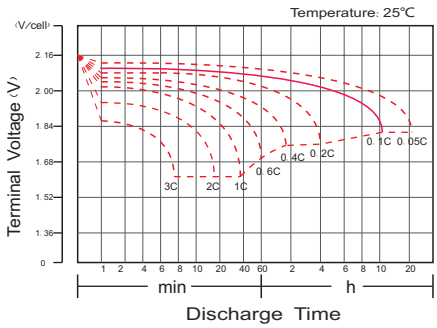
Constant Current Discharge Characteristics: A (25℃)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	496.7	355.9	259.0	162.6	91.89	52.46	36.90	30.54	25.72	18.26	15.72	8.314
1.65V/cell	483.4	338.7	253.7	159.9	91.47	52.06	36.76	30.39	25.56	18.11	15.57	8.163
1.70V/cell	455.6	326.7	249.7	158.5	90.62	51.67	36.47	30.25	25.41	17.96	15.42	8.012
1.75V/cell	409.1	301.5	237.7	154.5	89.77	51.28	36.33	29.97	25.11	17.81	15.27	7.861
1.80V/cell	369.2	274.9	219.1	147.7	87.65	50.36	35.34	29.26	24.66	17.51	15.12	7.710
1.85V/cell	321.4	245.7	196.6	138.4	83.27	48.12	33.79	27.85	23.60	16.77	14.66	7.256

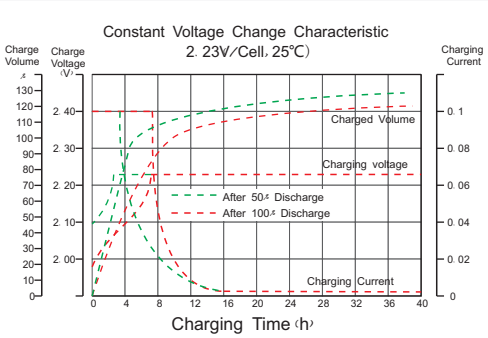
Constant Power Discharge Characteristics: W (25 ℃)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	4731	3459	2547	1835	1051	603.5	425.8	352.9	297.7	211.8	176.8	93.38
1.65V/cell	4634	3304	2494	1812	1046	601.1	425.0	352.0	295.9	211.0	175.0	92.47
1.70V/cell	4375	3194	2460	1791	1038	595.6	422.4	350.3	295.0	209.2	174.1	91.56
1.75V/cell	3939	2951	2346	1750	1028	590.1	419.9	347.8	292.2	207.4	172.2	90.66
1.80V/cell	3543	2680	2156	1670	1003	581.4	409.7	338.4	287.7	202.9	170.4	89.75
1.85V/cell	3059	2380	1925	1565	950.0	554.6	389.3	322.3	273.2	195.8	165.0	86.12

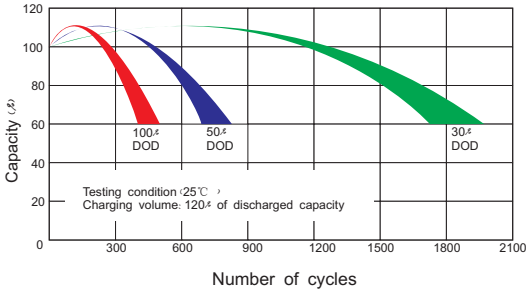
Discharge Characteristics Curve



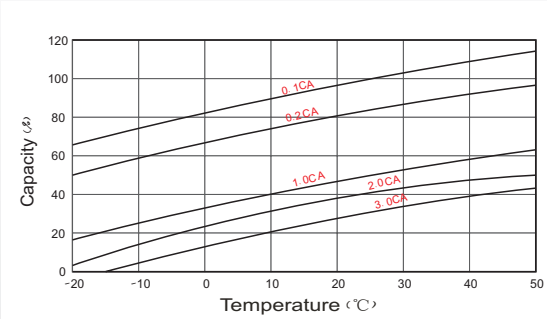
Charging Characteristics Curve



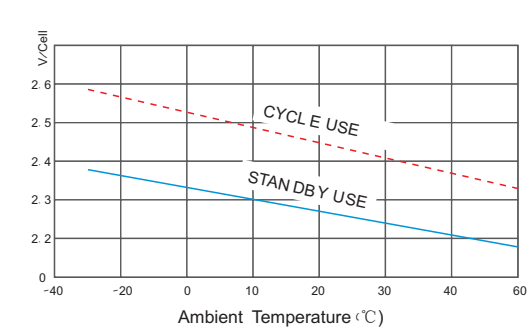
Cycle life in relation to depth of Discharge



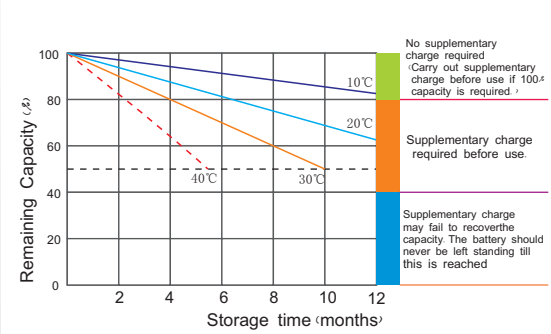
Temperature effects on Capacity



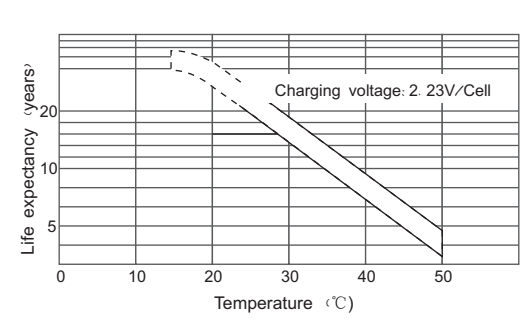
Relationship between charging voltage and temperature



Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use