

Specification

Nominal Voltage	12V
Number of cell	6
Nominal Capacity	55Ah@10hr-rate (5.5A to 1.80V/cell @25°C)
Weight	Approx. 16.1Kg
Terminal	M6, Ø=14
Container Material	ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.
Rated Capacity	56.8Ah 20hr-rate (2.84A to 1.80V/cell @25°C) 55.0Ah 10hr-rate (5.5A to 1.80V/cell @25°C) 47.6Ah 5hr-rate (9.52A to 1.75V/cell @25°C) 35.8Ah 1hr-rate (35.8A to 1.60V/cell @25°C)
Max. Discharge Current	550A(5sec)
Internal Resistance	Approx. 6.2mΩ(Fully charged)
Operating Temp. Range	Discharge: -20 °C~50°C Charge : -10°C~50°C Storage : -20°C~40°C
Cycle Use	Charging Current: ≤16.5A Voltage: 14.6V ~14.8V Temperature compensation: -30mV/°C
Standby Use	Charging Current: No limit Voltage: 13.6V ~13.8V Temperature compensation: -20mV/°C
Self-Discharge	less than 3% at 25°C
Design Life	15 years (floating charge)

Introduction

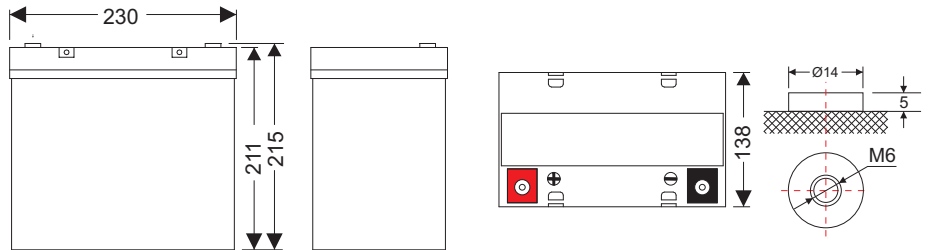
The NIMAC GEL-TECH batteries designed with 15+ years service life. The SOLID-GEL system can avoid corrosion and stratification. The special separator can properly prevent short-circuit. It can offer high deep discharge ability, super thermal stability, good recovery-ability after deep discharging. The 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	230±1mm (9.02 inches)
Width	138±1mm (5.43 inches)
Height	211±1mm (8.19 inches)
Total Height	215±1mm (8.39 inches)



Unit: mm

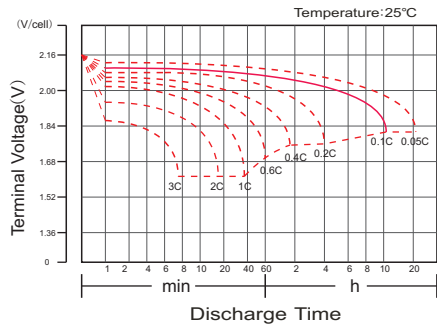
Constant Current Discharge Characteristics: A (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	173.8	128.0	98.30	63.57	35.93	21.07	14.43	11.94	9.773	6.866	5.806	3.070
1.65V/cell	168.8	121.8	96.28	62.52	35.76	20.91	14.37	11.88	9.715	6.810	5.750	3.014
1.70V/cell	163.8	117.5	94.77	61.96	35.43	20.76	14.26	11.83	9.658	6.754	5.694	2.959
1.75V/cell	147.1	108.4	90.24	60.42	35.10	20.60	14.21	11.72	9.543	6.699	5.638	2.903
1.80V/cell	132.8	98.86	83.18	57.76	34.27	20.23	13.82	11.44	9.370	6.587	5.582	2.847
1.85V/cell	115.6	88.35	74.61	54.11	32.56	19.33	13.21	10.89	8.968	6.308	5.415	2.679

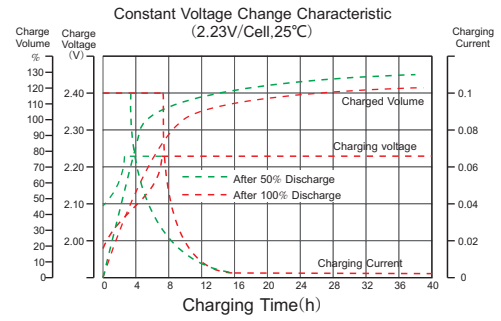
Constant Power Discharge Characteristics: W (25 °C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	1696	1266	1057.8	681.5	410.9	242.4	166.5	138.0	113.1	79.67	65.28	34.48
1.65V/cell	1650	1209	1035.8	673.0	408.9	241.5	166.2	137.6	112.4	79.34	64.61	34.15
1.70V/cell	1601	1169	1021.7	665.1	405.9	239.3	165.2	137.0	112.1	78.67	64.28	33.81
1.75V/cell	1441	1080	974.3	650.0	402.0	237.0	164.2	136.0	111.1	78.00	63.61	33.48
1.80V/cell	1296	980.5	895.2	620.4	392.0	233.5	160.2	132.3	109.3	76.33	62.94	33.14
1.85V/cell	1119	870.8	799.3	581.3	371.4	222.8	152.2	126.0	103.8	73.65	60.93	31.80

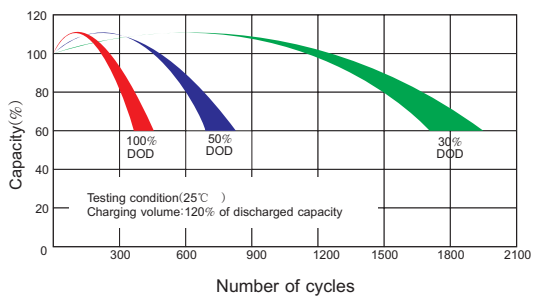
Discharge Characteristics Curve



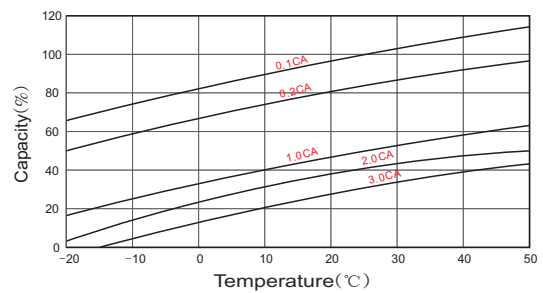
Charging Characteristics Curve



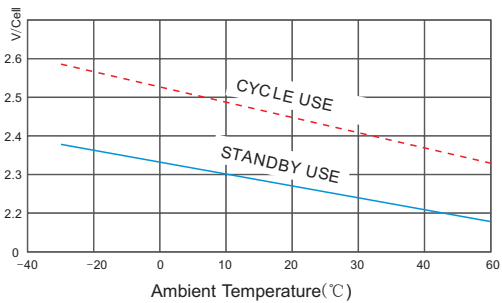
Cycle life in relation to depth of Discharge



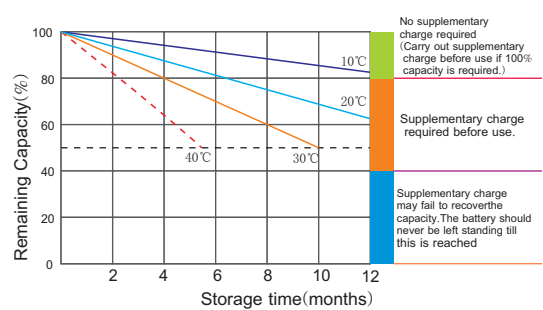
Temperature effects on Capacity



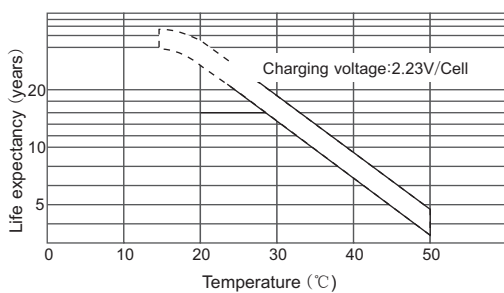
Relationship between charging voltage and temperature



Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use

