

### Specification

Nominal Voltage	12V
Number of cell	6
Nominal Capacity	120Ah@10hr-rate (12.0A to 1.80V/cell @25°C)
Weight	Approx.35.50Kg
Terminal	M8,Φ=16&18
Container Material	ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.
Rated Capacity	123.0Ah 20hr-rate (6.15A to 1.80V/cell @25°C) 120.0Ah 10hr-rate (12.0A to 1.80V/cell @25°C) 103.0Ah 5hr-rate (20.6A to 1.75V/cell @25°C) 75.0Ah 1hr-rate (75.0A to 1.60V/cell @25°C)
Max. Discharge Current	600A(5sec)
Internal Resistance	Approx.3.4mΩ(Fully charged)
Operating Temp. Range	Discharge: -40°C~60°C Charge : -20°C~50°C Storage : -40°C~60°C
Cycle Use	Charging Current: ≤24.0A Voltage:14.2V~14.4V Temperature compensation:-30mV/°C
Standby Use	Charging Current:No limit Voltage:13.6V~13.8V Temperature compensation:-20mV/°C
Self-Discharge	less than 1% at 25°C
Design Life	15 years (floating charge)

### Introduction

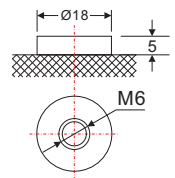
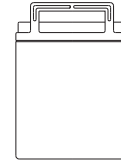
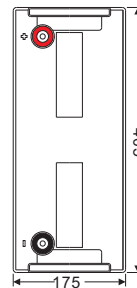
The NIMAC GEL-TECH batteries designed with 15+ years service life. The SOLID-GEL system can avoid corrosion and stratification. The special separator can properly prevent short-circuit. It can offer high deep discharge ability, super thermal stability, good recovery-ability after deep discharging. The 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	405±1mm (15.94 inches)
Width	175±1mm (6.89 inches)
Height	210±1mm (8.27 inches)
Total Height	236±1mm (9.29 inches)



Unit: mm

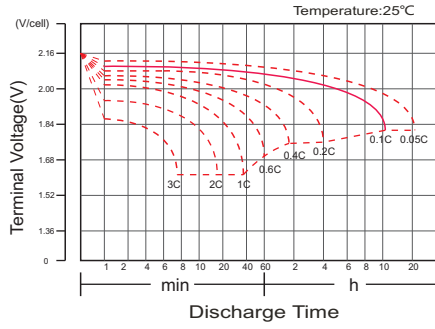
### Constant Current Discharge Characteristics: A (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	408.70	292.90	213.10	133.80	75.61	43.17	30.36	25.13	21.16	14.60	12.58	6.65
1.65V/cell	397.80	278.70	208.70	131.60	75.26	42.84	30.25	25.01	21.04	14.49	12.46	6.53
1.70V/cell	374.90	268.80	205.50	130.40	74.57	42.52	30.01	24.89	20.91	14.37	12.34	6.41
1.75V/cell	336.60	248.10	195.60	127.10	73.87	42.19	29.90	24.66	20.66	14.25	12.21	6.29
1.80V/cell	303.80	226.20	180.30	121.60	72.12	41.44	29.08	24.08	20.29	14.01	12.09	6.17
1.85V/cell	264.50	202.20	161.70	113.90	68.52	39.60	27.80	22.92	19.42	13.42	11.73	5.81

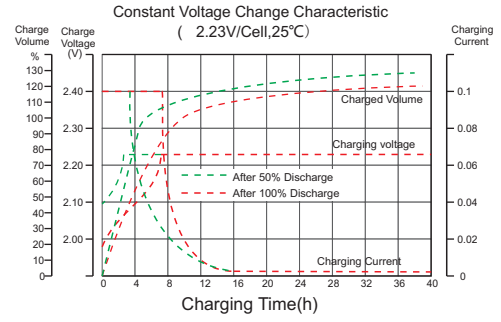
### Constant Power Discharge Characteristics: W (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	3893.00	3558.00	2620.00	1887.00	1081.00	620.70	438.00	362.90	306.20	211.80	176.80	93.38
1.65V/cell	3813.00	2719.00	2052.00	1491.00	860.60	494.60	349.70	289.70	243.50	168.80	140.00	73.98
1.70V/cell	3600.00	2628.00	2025.00	1473.00	854.30	490.10	347.60	288.30	242.70	167.30	139.20	73.25
1.75V/cell	3241.00	2429.00	1930.00	1440.00	845.90	485.50	345.50	286.20	240.50	165.90	137.80	72.53
1.80V/cell	2916.00	2205.00	1774.00	1374.00	825.00	478.40	337.10	278.50	236.70	162.40	136.30	71.80
1.85V/cell	2517.00	1958.00	1584.00	1288.00	781.70	456.30	320.40	265.20	224.80	156.70	132.00	68.90

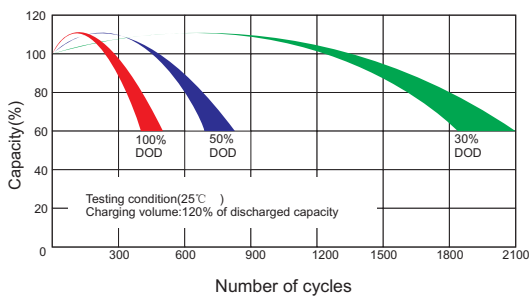
## Discharge Characteristics Curve



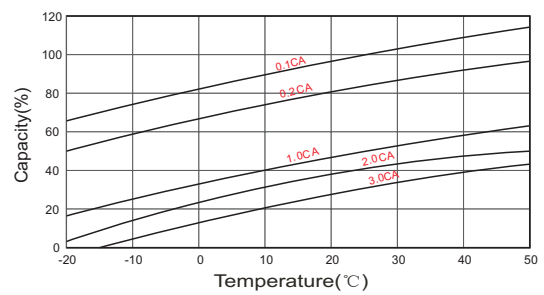
## Charging Characteristics Curve



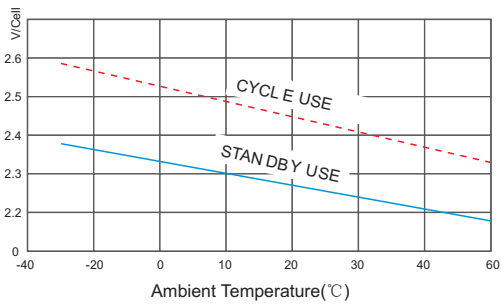
## Cycle life in relation to depth of Discharge



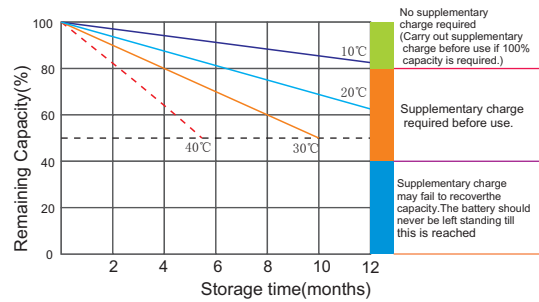
## Temperature effects on Capacity



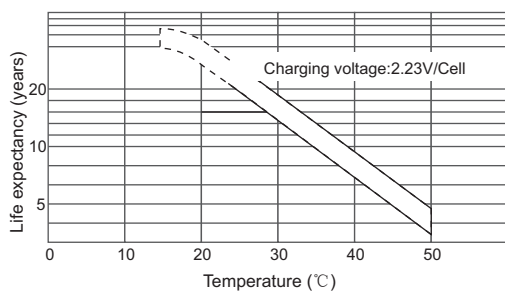
## Relationship between charging voltage and temperature



## Self-discharge Characteristics



## Temperature effects on Float life



## Life Characteristics of Standby use

