



Overview

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special oneway valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.



Battery Construction

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

General Features

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.
- Case and cover available in both standard and flame retardant ABS.

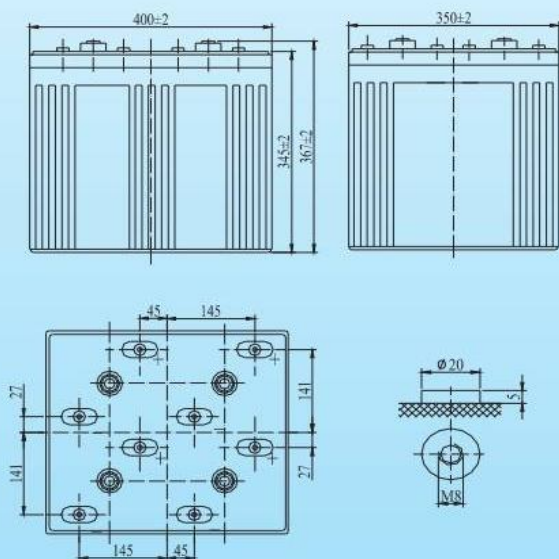
Battery Specification

Performance Characteristics	
Nominal Voltage	2V
Number of cell	1
Design Life	20 years
Nominal Capacity 77°F(25°C)	
10 hour rate (120A, 1.8V)	1200Ah
5 hour rate (216A, 1.75V)	1080Ah
1 hour rate (787A, 1.6V)	787Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	≤0.60mOhms
Self-Discharge	
3% of capacity declined per month at 20°C(average)	
Operating Temperature Range	
Discharge	-20-60°C
Charge	-10-60°C
Storage	-20-60°C
Max. Discharge Current 77°F(25°C)	4000A(5s)
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.40-2.45VPC
Maximum charging current	240A
Temperature compensation	-5.0mV/°C
Standby use	2.20-2.30VPC
Temperature compensation	-3.3mV/°C

Dimensions and Weight

Length(mm / inch)	400/15.75
Width(mm / inch)	350/13.78
Height(mm / inch)	345/13.58
Total Height(mm / inch)	367/14.45
Approx. Weight(Kg / lbs)	88.5/195

* Weight deviation: ± 3%



Total height with removable cover: 382

Discharge Constant Current (Amperes at 77°F25°C)

End Point							
Volts/Cell	15min	30min	45min	1h	3h	5h	10h
1.60V	1655	1201	905	787	331	230	129
1.65V	1576	1146	869	762	322	226	128
1.70V	1494	1092	831	736	310	221	126
1.75V	1410	1035	791	705	298	216	123
1.80V	1326	977	750	673	284	209	120

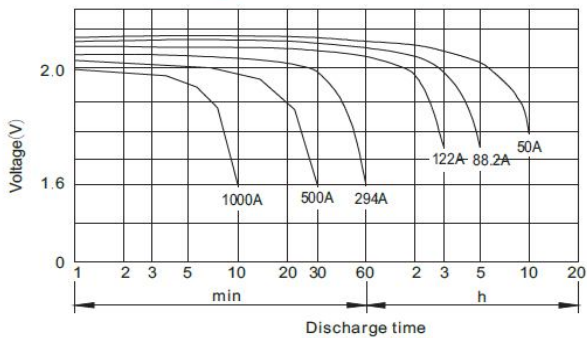
Discharge Constant Power (Watts at 77°F25°C)

End Point							
Volts/Cell	15min	30min	45min	1h	2h	3h	5h
1.60V	2623	1857	1444	1212	806	608	422
1.65V	2494	1765	1378	1161	771	579	416
1.70V	2363	1669	1309	1107	739	560	409
1.75V	2231	1573	1243	1059	703	538	402
1.80V	2072	1475	1176	1013	664	518	396

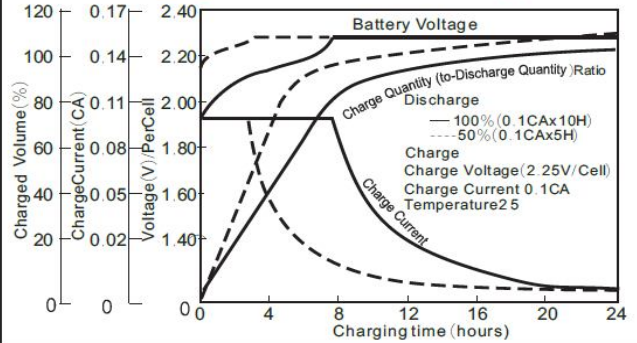
(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.All data shall be changed without notice,Vision reserves the right to explain and update the information contained hereinto.



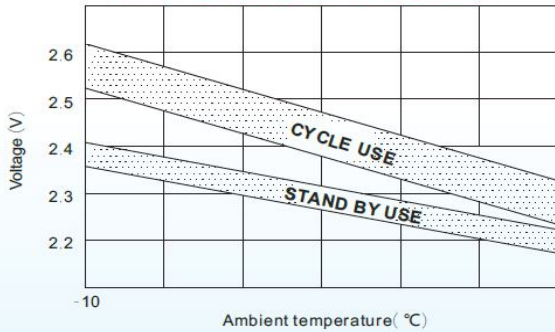
Discharge characteristic (25°C)



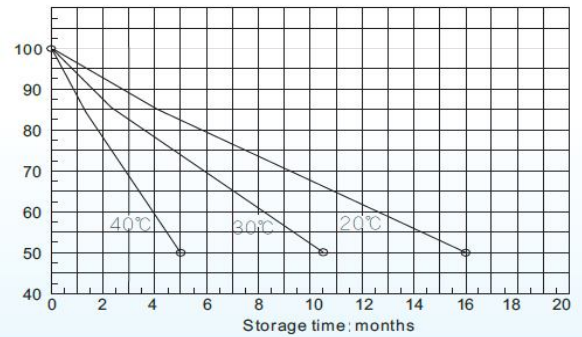
Charging characteristic for standby use



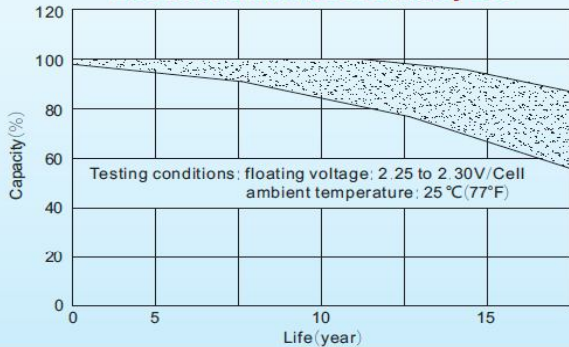
Relationship between charging voltage and temperature



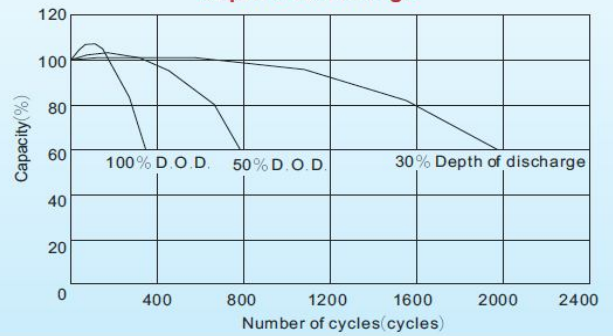
Self-discharge characteristic



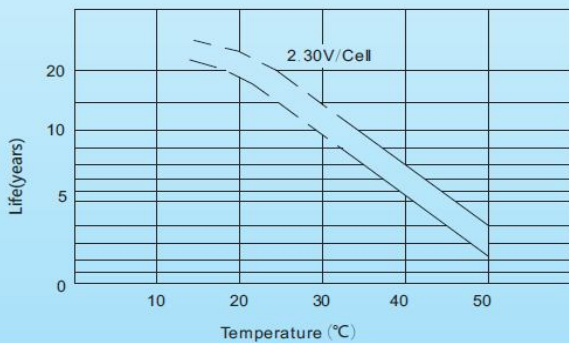
Life characteristics of standby use



Cycle service life in relation to depth of discharge



Temperature effects on float life



Temperature effects on capacity

