



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.

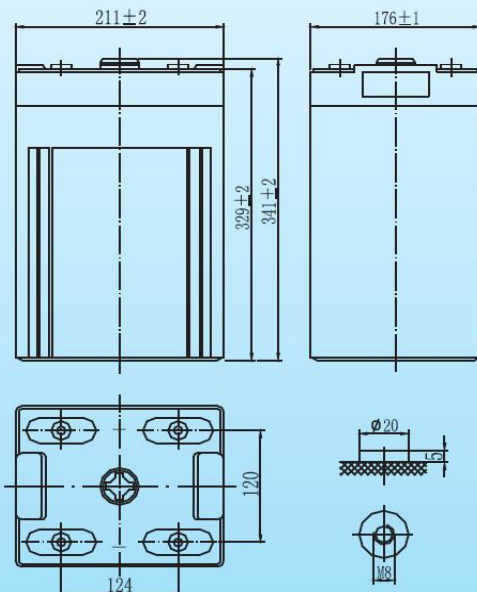
Battery Specification

Performance Characteristics	
Nominal Voltage	2V
Number of cell	1
Design Life	20 years
Nominal Capacity 77°F(25°C)	
10 hour rate (40.0A, 1.8V)	400Ah
5 hour rate (68.4A, 1.75V)	342Ah
1 hour rate (235A, 1.6V)	235Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	≤0.72mOhms
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)	2000A(5s)
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.40-2.45VPC
Maximum charging current	80A
Temperature compensation	-5.0mV/°C
Standby use	2.20-2.28VPC
Temperature compensation	-3.3mV/°C

Dimensions and Weight

Length(mm / inch)	211/8.31
Width(mm / inch)	176/ 6.93
Height(mm / inch)	329/ 12.95
Total Height(mm / inch)	367/ 14.5
Approx. Weight(Kg / lbs)	26.6/58.67

* Weight deviation: ± 3%



Total height with removeable cover: 367

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

End Point							
Volts/Cell	15min	30min	45min	1h	3h	5h	10h
1.60	558	406	309	235	108	73.8	43.0
1.65	531	388	296	226	105	72.1	42.4
1.70	504	369	283	218	101	70.3	41.7
1.75	475	350	270	208	96.9	68.4	40.9
1.80	447	330	256	198	93.1	65.9	40.0

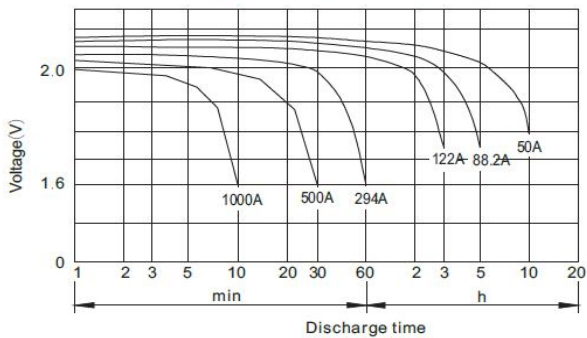
Discharge Constant Power (Watts at 77°F25°C)

End Point							
Volts/Cell	15min	30min	45min	1h	2h	3h	5h
1.60	864	703	609	468	295	203	133
1.65	817	668	580	447	272	199	131
1.70	770	632	547	427	257	193	128
1.75	722	595	516	404	247	187	125
1.80	675	558	484	381	234	176	119

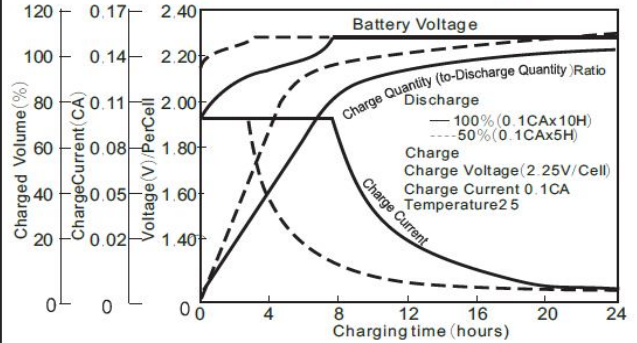
(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values. All data shall be changed without notice, Vision reserves the right to explain and update the information contained hereinto.



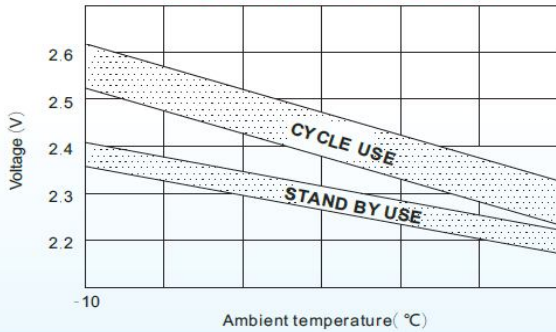
Discharge characteristic (25°C)



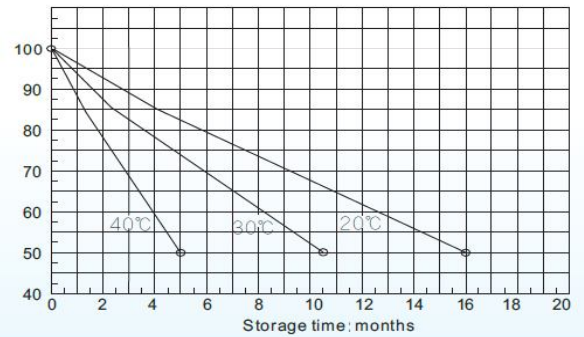
Charging characteristic for standby use



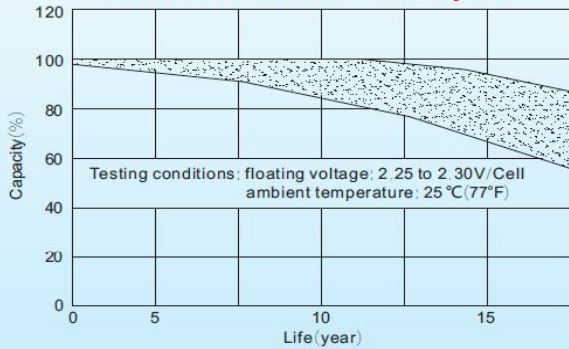
Relationship between charging voltage and temperature



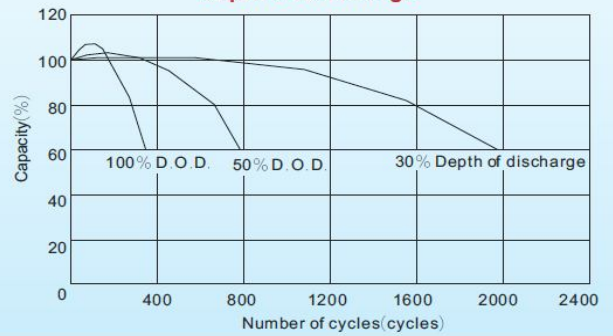
Self-discharge characteristic



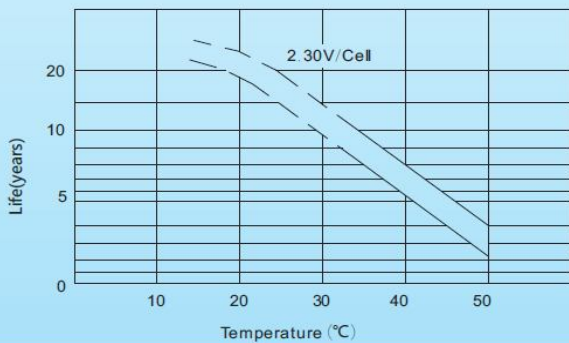
Life characteristics of standby use



Cycle service life in relation to depth of discharge



Temperature effects on float life



Temperature effects on capacity

