



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.

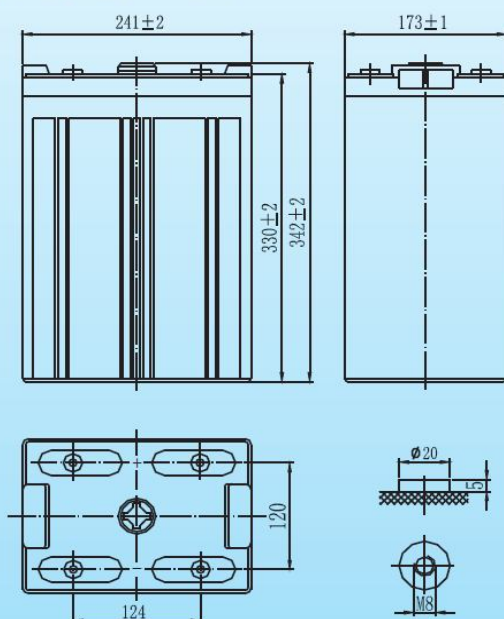
Battery Specification

Performance Characteristics	
Nominal Voltage	2V
Number of cell	1
Design Life	20 years
Nominal Capacity 77°F(25°C)	
10 hour rate (50.0A, 1.8V)	500Ah
5 hour rate (88.2A, 1.75V)	441Ah
1 hour rate (294A, 1.6V)	294Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	≤0.68mOhms
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)	2500A(5s)
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.40-2.45VPC
Maximum charging current	100A
Temperature compensation	-5.0mV/°C
Standby use	2.20-2.28VPC
Temperature compensation	-3.3mV/°C

Dimensions and Weight

Length(mm / inch)	242/9.35
Width(mm / inch)	173/6.81
Height(mm / inch)	330/12.99
Total Height(mm / inch)	365/14.37
Approx. Weight(Kg / lbs)	31.9 /70.3

* Weight deviation: ± 3%



Total height with removable cover: 365

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

End Point							
Volts/Cell	15min	30min	45min	1h	3h	5h	10h
1.60V	---	495	375	294	135	94.7	52.8
1.65V	---	472	361	284	131	92.8	52.0
1.70V	---	451	345	272	126	90.7	51.2
1.75V	---	426	328	261	122	88.2	50.2
1.80V	---	403	311	248	116	84.8	50.0

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

End Point							
Volts/Cell	15min	30min	45min	1h	2h	3h	5h
1.60V	---	911	756	613	370	265	185
1.65V	---	865	721	587	354	255	179
1.70V	---	819	685	561	338	242	172
1.75V	---	771	648	532	323	231	166
1.80V	---	723	611	504	298	213	160

(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.

