

## 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

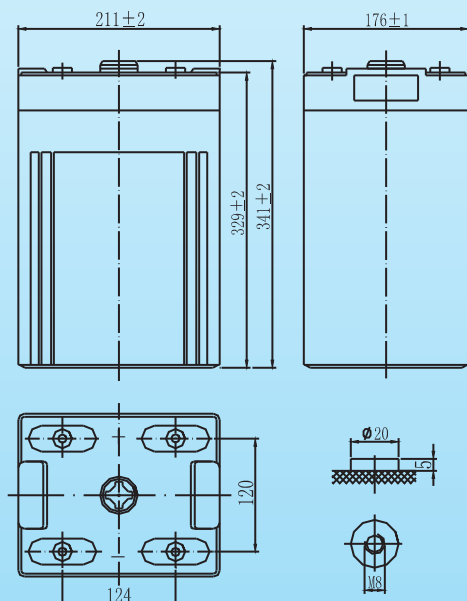
## General Features

- 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.

## 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)	28/61.7

\* Weight deviation:  $\pm 3\%$



Total height with removable cover: 367

## 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 (72.0A, 1.75V)	360Ah
1 hour rate (247A, 1.6V)	247Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	$\leq 0.72\text{mOhms}$
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	2.20-2.30VPC
Temperature compensation	-3.3mV/°C

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

End Point Volts/Cell	Time						
	15min	30min	45min	1h	3h	5h	10h
1.60V	587	427	325	247	114	77.7	43.0
1.65V	559	408	312	238	110	75.9	42.4
1.70V	530	388	298	229	106	74.0	41.7
1.75V	500	368	284	219	102	72.0	40.9
1.80V	470	347	269	208	98	69.4	40.0

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

End Point Volts/Cell	Time						
	15min	30min	45min	1h	2h	3h	5h
1.60V	909	740	641	493	310	214	140
1.65V	860	703	610	471	286	209	138
1.70V	810	665	576	449	270	203	135
1.75V	760	626	543	425	260	197	132
1.80V	710	587	509	401	246	185	125

(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.

