

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

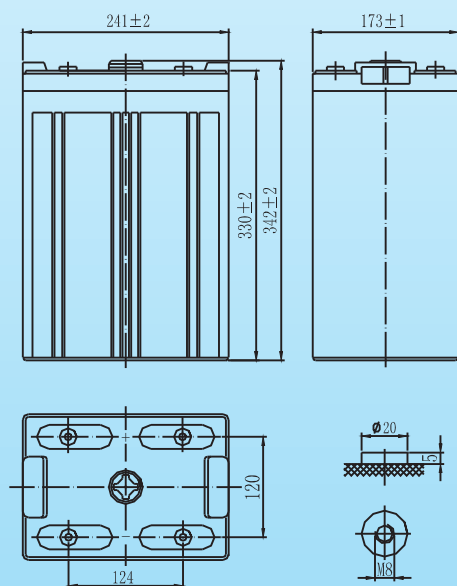
General Features

- 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)	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)	33 / 72.8

* Weight deviation: $\pm 3\%$



Total height with removable cover: 365

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 (90.0A, 1.75V)	450Ah
1 hour rate (300A, 1.6V)	300Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	$\leq 0.68\text{mOhms}$
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)	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	2.20-2.30VPC
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	711	505	383	300	138	96.6	53.9
1.65V	677	482	368	290	134	94.7	53.1
1.70V	642	460	352	278	129	92.5	52.2
1.75V	606	435	335	266	124	90.0	51.2
1.80V	570	411	317	253	118	86.5	50.0

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

End Point Volts/Cell	Time						
	15min	30min	45min	1h	2h	3h	5h
1.60V	1156	930	771	625	378	270	167
1.65V	1094	883	736	599	361	260	164
1.70V	1030	836	699	572	345	247	161
1.75V	967	787	661	543	330	236	157
1.80V	903	738	623	514	304	217	149

(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.



VISION GROUP
Shenzhen Center Power
Tech.Co.Ltd.,

CL500 2V 500Ah(10hr)

