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 one-way 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

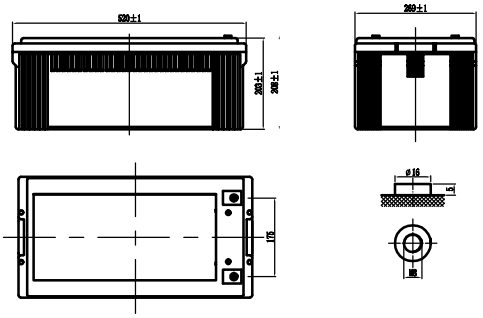
Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

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.

Dimensions and Weight

Length(mm / inch)	520 / 20.5
Width(mm / inch)	269 / 10.6
Height(mm / inch)	203 / 8.0
Total Height(mm / inch)	208 / 8.2
Approx. Weight(Kg / lbs)	67 Kg



Performance Characteristics

Nominal Voltage	12V
Number of cell	6
Design Life	10 years
Nominal Capacity 77ºF(25ºC)	
10 hour rate (11.5A, 10.8V)	230Ah
5 hour rate (40.3A, 10.5V)	201.5Ah
1 hour rate (150A, 9.6V)	150Ah
Internal Resistance	
Fully Charged battery 77ºF(25ºC)	2.8mOhms
Self-Discharge	
3% of capacity declined per month at 20ºC(average)	
Operating Temperature Range	
Discharge	-20~60ºC
Charge	-10~60ºC
Storage	-20~60ºC
Max. Discharge Current 77ºF(25ºC)	1100A(5s)
Short Circuit Current	4300A
Charge Methods: Constant Voltage Charge 77ºF(25ºC)	
Cycle use	14.4-14.7V
Maximum charging current	63A
Temperature compensation	-30mV/ºC
Standby use	13.6-13.8V
Temperature compensation	-20mV/ºC

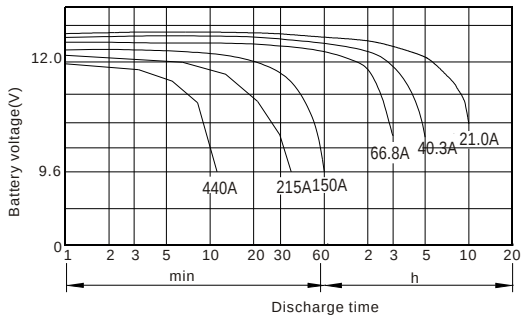
Constant current discharge ratings-amperes at 25ºC

End Point Volts/Cell	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	546	416	256	147	64.6	42.2	23.4	12.3
1.65V	522	396	251	142	62.5	41.0	23.3	12.2
1.70V	493	375	246	136	60.4	39.9	23.3	12.1
1.75V	463	355	241	131	57.8	38.7	23.2	12.0
1.80V	439	335	237	125	55.2	37.5	23.0	11.9

Constant power discharge ratings-watts at 25ºC

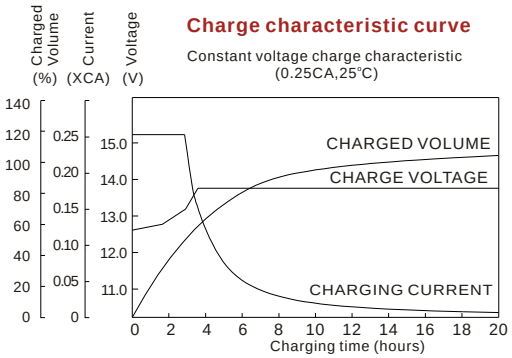
End Point Volts/Cell	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	983	753	466	269	119	78.1	43.5	23.0
1.65V	934	712	454	258	114.	75.5	43.1	22.7
1.70V	877	672	443	246	110	72.9	42.8	22.4
1.75V	820	632	432	235	104.	70.4	42.5	22.1
1.80V	773	593	421	224	99.4	67.9	41.9	21.8

Discharge characteristic (25°C)

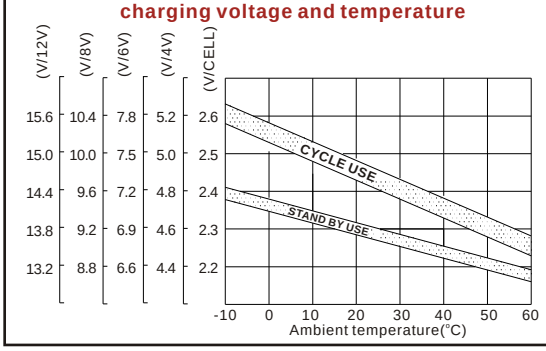


Charge characteristic curve

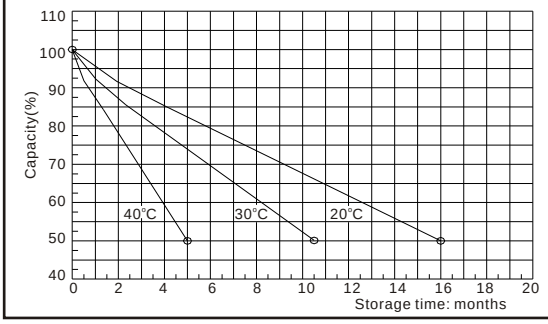
Constant voltage charge characteristic (0.25CA,25°C)



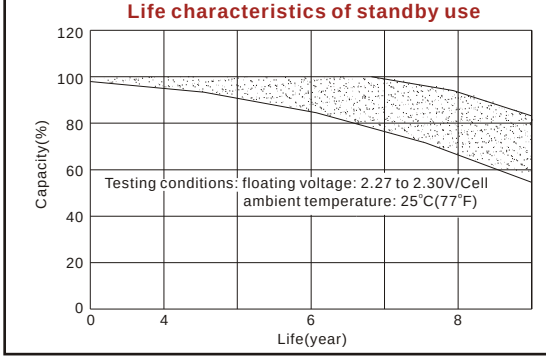
Relationship between charging voltage and temperature



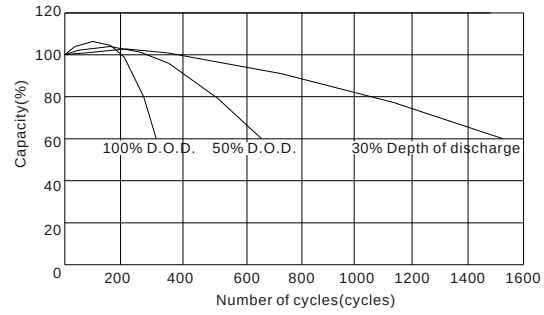
Self-discharge characteristic



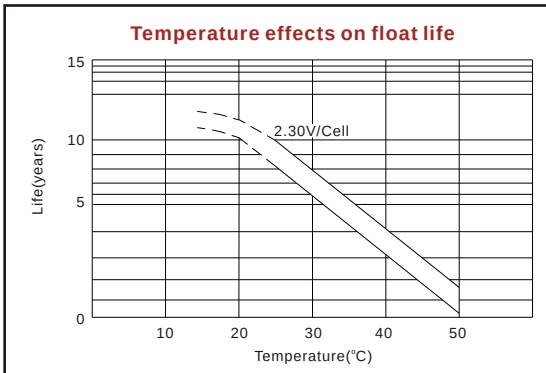
Life characteristics of standby use



Cycle service life in relation to depth of discharge



Temperature effects on float life



Temperature effects on capacity