

Overview

Gel battery shows some distinctive advantages over flooded battery or AGM battery, such as super thermal stability, high deep discharge capability, good recovery from deep discharge, even if the battery is left discharged for three days, it will recover to 100% of capacity. With the above-mentioned advantages, the gel battery has long service life, specially suitable for motive power applications, such as golf trailer, sruubber, folklift, etc. The deep discharge cycles increased 50% as compared with the AGM battery.

Battery Construction

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

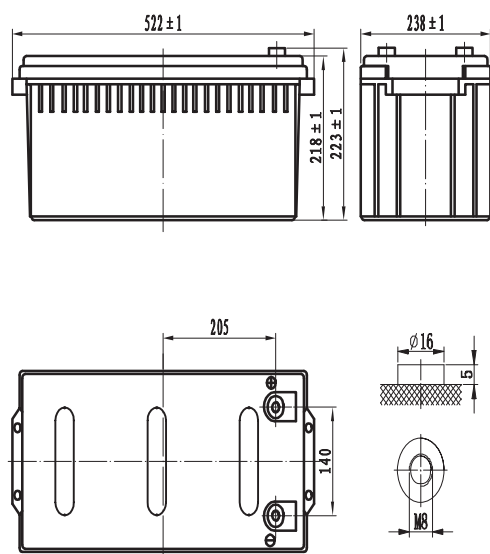
General Features

- Micro millimeter SiO₂ and H₂SO₄ gelled electrolyte technology for efficiency 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)	522/20.55
Width(mm / inch)	238/ 9.37
Height(mm / inch)	218/8.58
Total Height(mm / inch)	223/8.78
Approx. Weight(Kg / lbs)	65.0/143.3

* Weight deviation: ± 3%



Battery Specification

Performance Characteristics

Nominal Voltage	12V
Number of cell	6
Nominal Capacity 77°F (25°C)	
20 hour rate (10.25A, 10.5V)	205Ah
10 hour rate (20.0A, 10.8V)	200Ah
5 hour rate (36.0A, 10.5V)	180Ah
1 hour rate (131A, 9.6V)	131Ah
Internal Resistance	
Fully Charged battery 77°F (25°C)	≤ 3.8mOhms
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)	1000A(5s)
Short Circuit Current	3300A

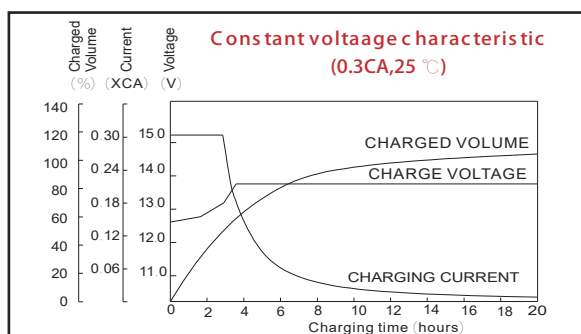
Discharge Constant Current (Amperes at 77°F 25°C)

End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h	20h
1.60V	507	405	332	223	131	53.9	40.2	20.4	10.55
1.65V	481	386	317	214	126	52.1	38.7	20.3	10.50
1.70V	453	366	301	205	122	50.3	37.5	20.2	10.45
1.75V	427	346	287	195	116	48.6	36.0	20.1	10.40
1.80V	399	324	270	184	110	46.2	34.3	20.0	10.20

Discharge Constant Power (Watts at 77°F 25°C)

End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	865	708	575	398	300	239	133	97.9	71.0
1.65V	831	684	558	388	293	234	131	96.1	70.9
1.70V	797	659	539	377	286	229	128	94.3	69.8
1.75V	762	633	521	364	276	222	125	92.6	68.8
1.80V	725	605	498	350	267	215	120	89.4	67.7

(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, Luxury reserves the right to explain and update the information contained hereinto.



CHARGING METHODS: Constant voltage charging at 25°C

Standby use: No charging current limit is required

Charging voltage: 13.38–16.68V

Cyclic use: Maximum charging current: 30% of rated capacity

Charging voltage: 14.28–14.52V

Temperature compensation :

stand by - 20mV/°C

cyclic use -30mV/°C

