

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, scrubber, forklift, etc. The deep discharge cycles increased 50% as compared with the AGM battery.

Features

- Wind and solar energy systems
- Cable TV systems
- Telecommunications
- Electric wheel chairs
- Military equipment
- Emergency lighting
- Power plants
- Medical equipment
- Golf carts

Battery Specification

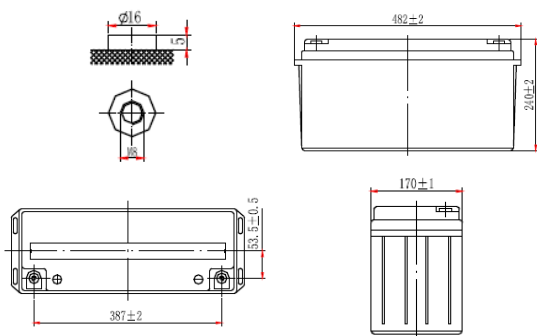
Nominal Characteristics	
Nominal Voltage /V	12
Nominal Capacity /Ah (25° C, 0.2C)	120
Mechanical characteristics	
Weight (Kg/lbs)	44.5 / 98.2
Dimension L*W*H /mm	482*170*240
Terminal	F11
Electrical characteristics	
Voltage window/V	1.70
Float charge voltage/V	14.1/ 14.4
Max. continue discharge current/A	24
Max. permanent discharge current/A	750 (5Sec)
Max. continue charge current/A	6.15
Operating conditions	
Cycle life (+20°C 0.2C 100%DOD)	>1200 Cycles
Operating temperature	Discharge -20°C to 60°C Charge -10°C to 60°C
Storage temperature	-20 to 60°C
Storage duration	6 months
Safety standard	25°C

Certifications

ISO 9001:2008 ISO 14001:2008



Terminal



Image



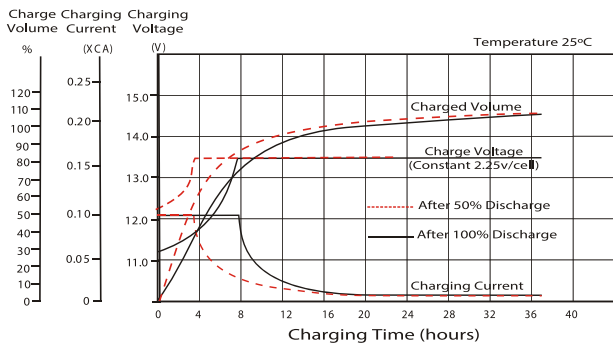
Discharge Constant Current (Amperes) at 77°F (25°C)

Volts/cells	5min	15min	30min	1h	3h	5h	10h	20h
1.80V	194	154	108	63.6	28.0	20.4	12.0	6.30
1.75V	209	168	113	67.2	29.2	21.1	12.1	6.42
1.70V	223	182	115	69.6	29.6	21.6	12.2	6.48
1.65V	238	192	118	72.2	30.4	22.1	12.4	6.60
1.60V	252	206	120	74.4	31.2	22.8	12.6	6.72

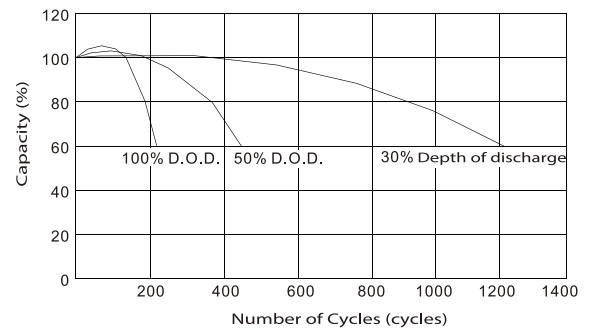
Discharge Constant Power (Watts per cell) at 77°F (25°C)

Volts/cells	10min	15min	1h	3h	5h	10h	20h
1.80V	361	295	117	47.0	35.9	19.6	11.1
1.75V	380	312	123	50.0	38.5	20.9	11.5
1.70V	400	333	127	52.6	39.4	21.7	11.9
1.65V	411	347	132	55.4	41.3	23.2	12.5
1.60V	431	350	139	58.4	43.8	24.4	13.2

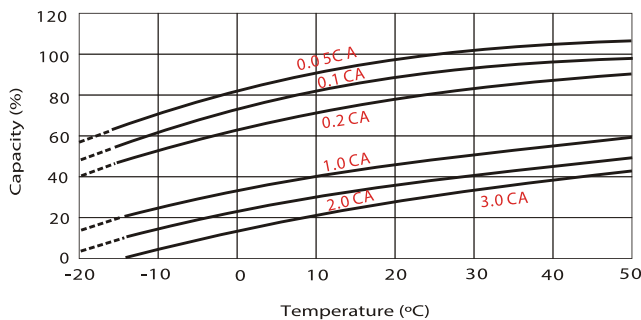
Charging Characteristics (float use)



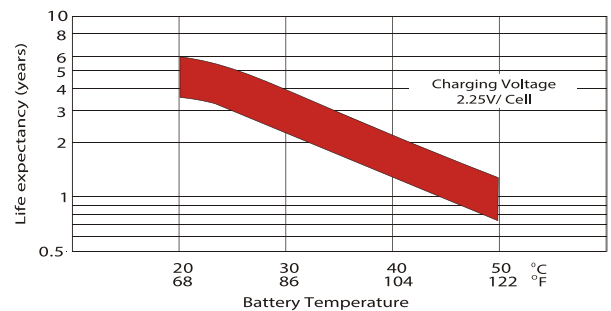
Cycle Life in Relation to Depth of Discharge



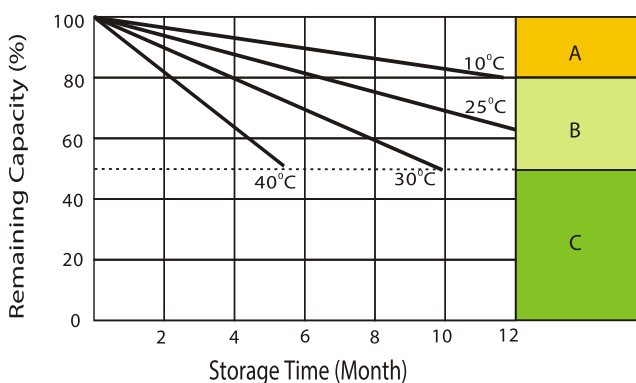
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics



- A** No supplementary charge required
(carry out supplementary charge before use if 100% capacity is required)
Supplementary charge required before use. Optional charging way a below:
- B**
 - Charged for above 3 days at limited current 0.25 CA and constant voltage 2.25V / cell.
 - Charged fo above 20 hours limited current 0.25CA and constant voltage 2.45V / cell.
 - Charged for 8-10 hours ar limited current 0.05 CA.
- C** Supplementary charge often fail to recover the capacity. The battery should never be left standing till this is reached.

