

SMF

Sealed
Maintenance
Free Battery



Features:

- ▶ Compact Design for Power to Power Ratio.
- ▶ High Deep Cycle Recovery Capability.
- ▶ Robust & Aesthetically Robust Design.
- ▶ Effective & Reliable Performance under Float and Cyclic Application.

Introduction of Company

Let's improve the quality of life!

From a modest start in early 2000 we invested a lot of time, effort and money solving the customer's problem in the areas of electricity. Today we can't imagine life without electricity. We always strive to offer a solution to our customers which can bring brightness and smiles in their life. After successfully developing market, customer awareness and establishing a few brands in more than 30 countries and having focus on green energy, we have been engaged in the areas of energy storage, renewable energy, storage products and electrical solution.

The backbone of the company are-

- Having 3 state-of-the-art manufacturing facilities in North of India.
- Total Installed capacities of all the batteries are more than 1 million a year.
- Leading supplier of private label brands from India.
- Products approved for Saber Saleem (SASO), SONCAP by SGS and Intertek, CBCA by BIVAC.
- Products complied for JIS 8702-1:2009, IEC 60086, IEC 60896-22:2004.

AGM VRLA SERIES

Altima AGM VRLA batteries are high quality, maintenance-free batteries produced at state-of-the-art manufacturing facility with advanced battery manufacturing technologies and high purity materials. It has a long float and cyclic life span, high specific energy, and low self-discharge rate. Completely leak-proof, it has excellent anti-corrosion properties and performs flawlessly in varying temperature conditions.

Altima AGM VRLA batteries have a design life ranging from 5 to 10 years and are backed by standard warranties depending on the models.

Salient Features

Features

- Design life of 5 to 10 years at 27°C, depending on the model
- Superior Lead Calcium alloy grid with high density active materials
- Excellent cyclic performance and recovery after over-discharging
- High purity material ensuring low self-discharge
- Valve regulated (sealed) construction for sales operation in any position
- Tank formed plates optimise cell voltage balance and performance
- Completely leak-proof and maintenance-free
- Compact design with high power to power ratio
- High impact ABS casing

DEEP CYCLE SEALED
MAINTENANCE FREE BATTERY



Applications



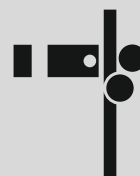
UPS backup



Emergency lighting



Telecommunications power supply



Railway signaling systems



Medical equipments



DC power supply



Electronic weighing machines

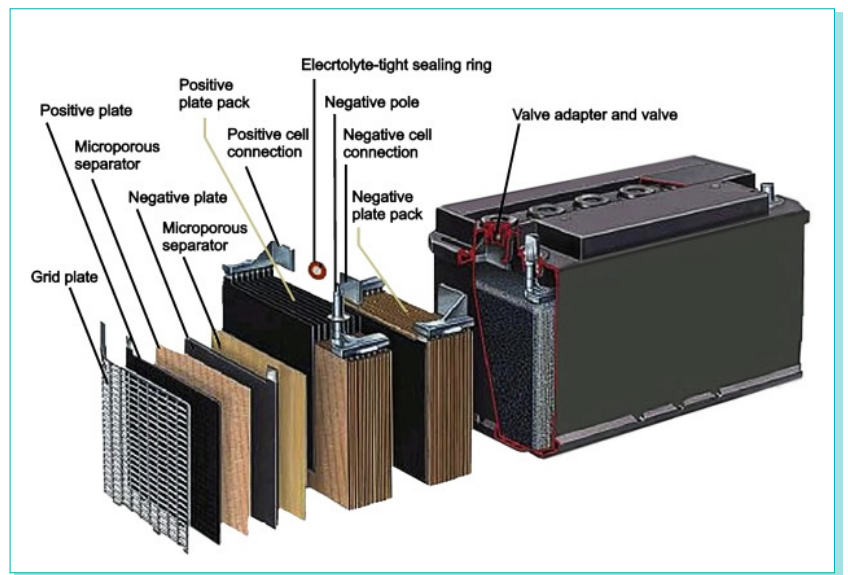


Power station systems



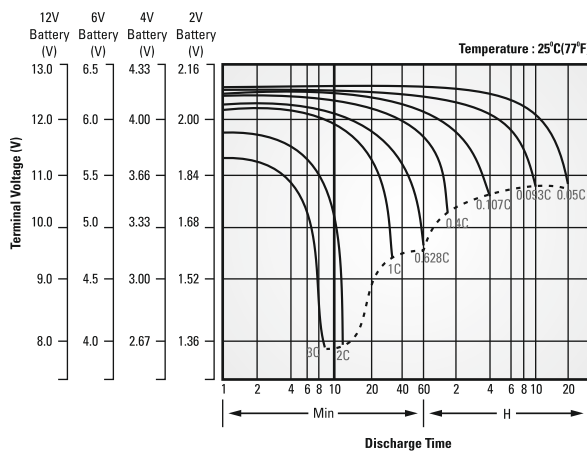
Network communication equipments

Cross Section View

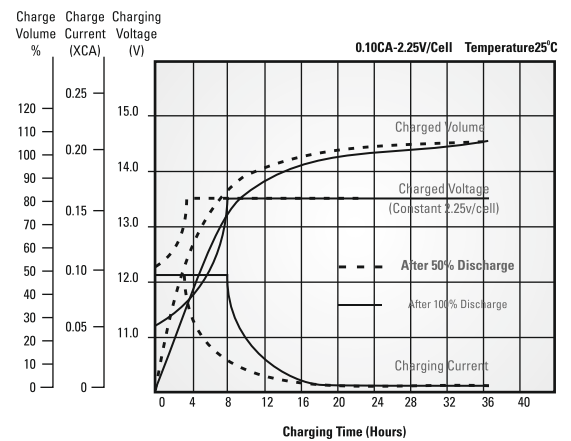


Electrical Performance

Discharge Characteristics

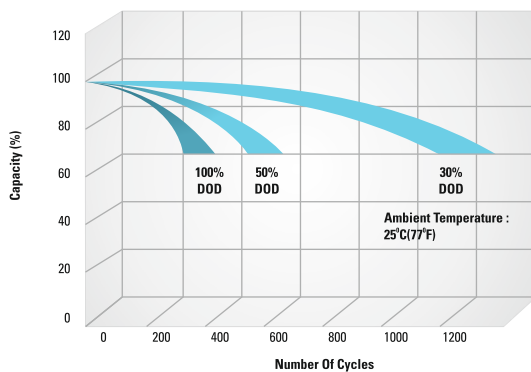


Float Charging Characteristics

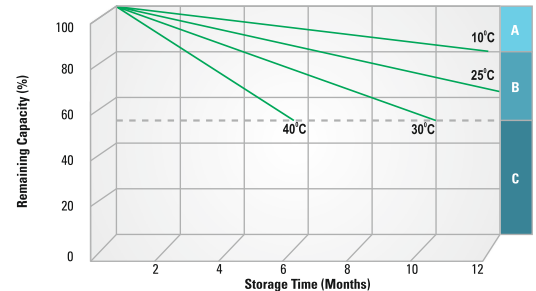


Cycle Life in Relation to Depth of Discharge

Testing Condition
Temperature : 25°C.
Discharging : $3.4 \times I_{20}$ for 3 hours.
Charging : $6 \times I_{20}$ for 16 hours at 14.1V.



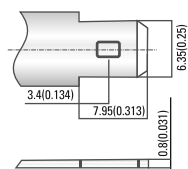
Self Discharge Characteristics



- A** No Supplementary Charge required
(Carry out supplementary charge before use if 100% capacity is required)
- B** Supplementary Charge required before use. Optional charging way as below :
1. Charge for 16-20 hours at $0.065C_{20}$ at constant voltage 2.3 V/Cell
2. Charge for 30-36 hours at $0.05C_{20}$ at constant voltage 2.35 V/Cell
- C** Supplementary Charge may often fail to recover the capacity
The battery should never be left standing till this is reached

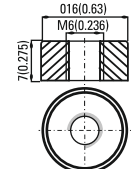
Battery Terminal Options

Terminal Type : F2



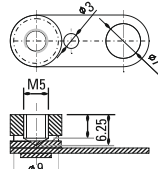
Faston Type (Brass) Quick Disconnect Tabs; Silver Coating For Better Conductivity

Terminal Type : T6



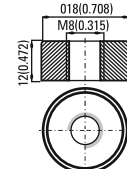
Brass Coated With Tin.
Threaded Insert
6mm Stud.
Torque : 5.2 N*m

Terminal Type : T4



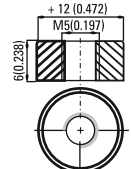
Brass Coated With Tin.
Threaded Insert
Torque : 3.0 N*m

Terminal Type : T8



Brass Coated With Tin.
Threaded Insert
8mm Stud.
Torque : 12.5 N*m

Terminal Type : T5



Brass Coated With Tin.
Threaded Insert
5mm Stud.
Torque : 3.0 N*m

Technical Specifications

Model	Capacity (AH) at 27 °C					HRD 0.5 hr Amperes 9.6V	Dimensions (mm) ± 3mm				Normal Charging Current (A)	Short Circuit Current (A)	Internal Resistance (mΩ)	Battery Weight (Kg) ± 3%	Terminal Type
	20 hr 10.5V	10 hr 10.5V	5 hr 10.5V	3 hr 10.5V	1 hr 10.2V		Length	Width	Height	Total Height					
AL12-7	7.00	6.51	5.95	5.25	4.20	7.00	151.50	65.00	94.00	100.00	0.70	105.00	30.00	2.15	F2
AL12-12	12.00	11.16	10.20	9.00	7.20	12.00	151.00	98.00	94.50	100.00	1.20	180.00	15.00	3.55	F2
AL12-18	18.00	16.74	15.30	13.50	10.80	18.00	180.00	77.00	172.00	172.00	1.80	270.00	14.00	6.00	T4
AL12-28	26.00	24.18	22.10	19.50	15.60	26.00	166.00	176.00	125.00	125.00	2.60	390.00	14.00	8.45	T5
AL12-45	45.00	41.85	38.25	33.75	27.00	45.00	197.00	165.00	179.00	179.00	4.50	675.00	13.00	14.50	T6
AL12-70	65.00	60.45	55.25	48.75	39.00	65.00	349.00	167.00	190.00	192.00	6.50	975.00	11.00	21.90	T6
AL12-100	100.00	93.00	85.00	75.00	60.00	100.00	331.00	173.00	223.00	225.00	10.00	1500.00	5.30	30.00	T6
AL12-150	150.00	139.50	127.50	112.50	90.00	150.00	485.00	170.00	242.00	242.00	15.00	2250.00	3.60	43.70	T8
AL12-200	200.00	186.00	170.00	150.00	120.00	200.00	522.00	238.00	219.00	225.00	20.00	3000.00	3.60	60.00	T8
AL12-220	220.00	204.60	187.00	165.00	132.00	220.00	522.00	238.00	219.00	225.00	22.00	3300.00	3.00	63.00	T8
AL12-240	240.00	223.20	204.00	180.00	144.00	240.00	522.00	238.00	219.00	225.00	24.00	3600.00	3.00	66.00	T8

