

# 12ASTT150 (12V-150Ah)

# Tubular Battery

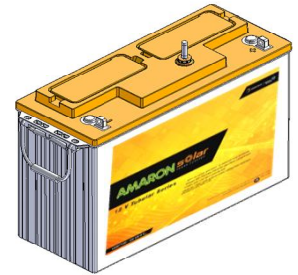
### Introduction:

After pioneering in VRLA technology, Amara Raja, now brought to you ultra low maintenance free tubular batteries with best in class design with advance manufacturing technology. With decades of experience we gain in battery technology, coupled with continuous research has helped us to bring this highest quality product.

Uniquely built Amaron Solar Tubular batteries has covered all aspects in design, required to give high life and suits for daily charge-discharge cycling, works effectively in Partial State of Charge (PSOC) operations, beside it ensure fast charge with high efficiency and the reliable and consistent performance makes Amaron Solar Tubular batteries, the best and perfect choice for Solar Photovoltaic and other Renewable energy based applications.

### Design Features & Benefits:

- Hi-coerce™ spine cast – High pressure spine casting (> 100 bar) provides uni-directional grains orientation with micro hardness extradite superior life.
- Bountiful Boss™ – Allows rapid charge & delivers high power. Optimized current dense & higher conductivity leading to last long.
- Panoptic Spine™ – Mitigates corrosion prone zone, provides high life – Really long.
- Satiated wet paste™ – Higher active material integrity, lowers resistance to delivers consistent power & life.
- Endura cast™ – Automated cast-on-strap delivers durability & performance.
- Unified Termi Seal™ – Rigid & Integrated terminal connectivity provides sustainable strength.



### Specifications:

Nominal Voltage	12V	
Rated capacity @C10 at 27°C at 1.80CV	150Ah	
Dimensions (±3 mm)	Length	500mm
	Width	189mm
	Height*	398mm
Weight with acid in Kg (±5%)	58.0	

\*H - Height up to top of cover

### Major Applications :

- Solar Photovoltaic Power plants
- Home & Street Lighting
- Power Plants & Substation
- Corporate Establishments
- Telecommunications
- Railways & Defense
- Banks & IT Parks
- Other Cyclic Applications

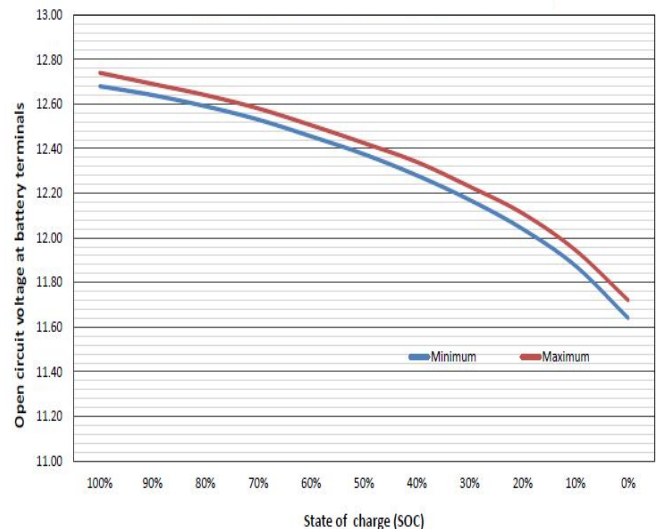
**Applicable Standards:** Batteries generally conforms to

- IS 13369 spec.
- IS 16270 spec.

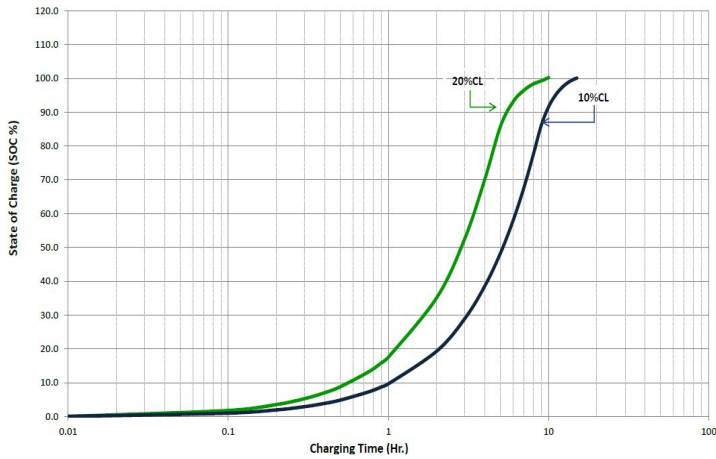
### Product Details:

Type of +ve plate	Tubular
Type of -ve plate	Flat Pasted
Terminal Type	L-Terminal with Antimony Lead Alloy
Type of separator	PE
Type of container	PPCP
Operating temp. range of battery	-20°C to +60°C
Self-discharge for 28 days	≤5% (As per IS13369 ≤10%)
Recommended Max period of storage	Max. 60days at 27°C
Electrolyte specific gravity of the end charge at 27°C	1.24
Electrolyte specific gravity of the end discharge	1.13

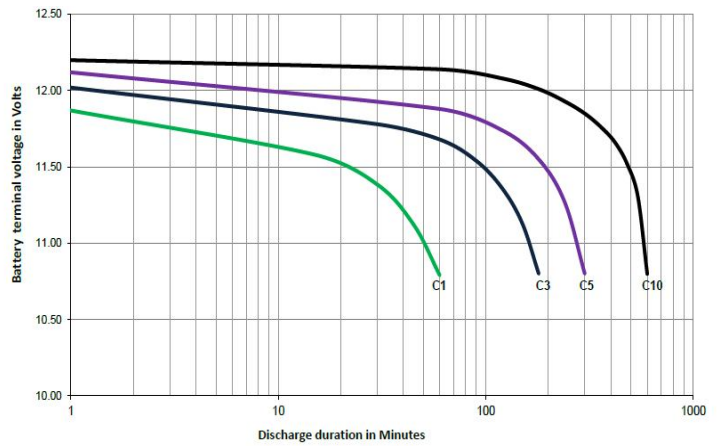
### State of charge (SOC) Vs Open Circuit Voltage (V)



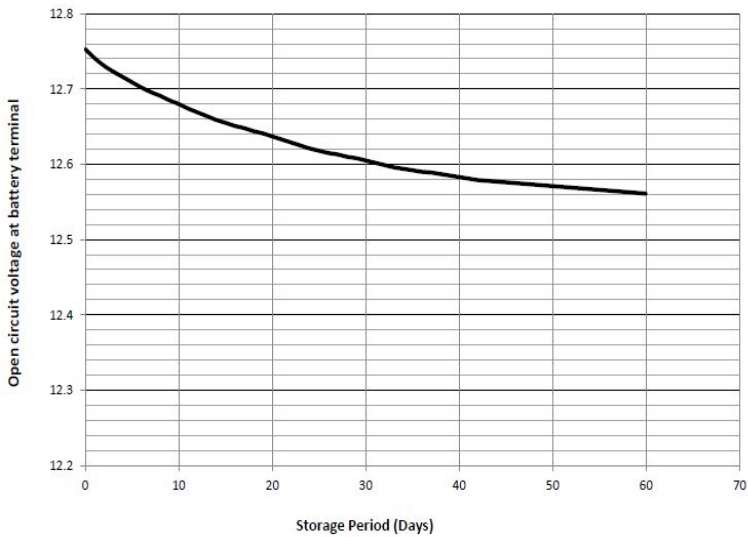
**Constant voltage charging characteristics with 14.4V**



**Discharge Characteristics**



**Shelf Life Characteristics at 27°C**



**Charging Parameters :**

**Constant Voltage charging at 27°C:**

- Dual Mode Charge & the charging facility should have auto float change over and charge mode facilities with the recommended voltage settings
- Charging current - Min.10% of rated Ah capacity
- Float Voltage - 14.4 ± 0.1V /battery
- Boost Voltage - 15.0 ± 0.1V /battery
- Over cutoff voltage - 15.2V
- Under cutoff voltage - 10.8V

**Test for Capacity:**

On the first discharge, batteries shall give not <85 percent of the rated capacity and the rated capacity shall be reached within 10 discharges subsequent to the initial charge (Ref: IS 13369 Clause No.: 11.5.4)

**Glimpse of Advanced Manufacturing Technology :**



**Red Lead Mfg.**



**Pressure Die Casting**



**Acid Circulated formation**

**Reach us :**

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