

TECHNOPOWER SOLAR TALL TUBULAR BATTERIES

General Features

Available is SOLAR Tubular Range TECHNOPOWER 12V low maintenance Tubular battery for Solar photovoltaic application comes with high quality Tubular plate and its performance characteristics conform to IS 13369 : 1992 with latest amendments

PPCP Container

High tensile, acid resistant Polyester Gauntlets

Low resistance Fasteners.

Heavy duty Terminal

Microporous Ceramic Vent Plug

High porosity Envelope Separators

Tubular Positive Plates

Pasted Negative Plates



ISO 9001 ISO 14001

- » Slurry filled tubular technology
- » Longer cycle life & low maintenance
- » Tubular designed plate
- » Excellent charge acceptance
- » Suitable for frequent power cut



Technical Specifications

| Model | Nominal Voltage | Rated Capacity (Ah) at 20HR (C20) | Plates Number | Positive Plates per Battery | Negative Plates per Battery | Spines Number | Plates Height | Positive Plates Thickness | Negative Plates Thickness | T-Bag Thickness | T-Bag Height | Dimensions (L*H*W) ± 1mm | Dry Weight Kg. (± 1.5%) | Electrolyte Volume Kg | Filled Weight Kg.(± 1.5%) | Gross Weight Kg. (± 1.5%) |
|-------------------|-----------------|-----------------------------------|---------------|-----------------------------|-----------------------------|---------------|---------------|---------------------------|---------------------------|-----------------|--------------|--------------------------|-------------------------|-----------------------|---------------------------|---------------------------|
| GLORY ASIT 12-165 | 12 V | 150 | 7P PER CELL | 18 | 24 | 15 | 210 MM | 4.5 MM | 2.8MM | 8mm | 200MM | 25*476*225 | 33.36 | 24.9 | 58.26 | 60 |
| GLORY ASIT 12-200 | 12 V | 180 | 7P PER CELL | 18 | 24 | 15 | 235 MM | 4.5MM | 3.0MM | 8mm | 225MM | 25*476*225 | 37.8 | 23.8 | 61.6 | 63.12 |
| GLORY ASIT 12-220 | 12 V | 200 | 9P PER CELL | 24 | 30 | 15 | 210 MM | 4.5MM | 2.8MM | 8mm | 200MM | 25*476*225 | 41.36 | 23.68 | 65.04 | 66.66 |
| GLORY ASIT 12-250 | 12 V | 230 | 9P PER CELL | 24 | 30 | 15 | 235 MM | 4.5MM | 3.0MM | 8mm | 225MM | 25*476*225 | 46.3 | 23.52 | 69.82 | 71.48 |

| Electrical Parameters | | | Capacity (Ah) when discharged to 10.5V (1.75VPC) and 27C | | | | | | Efficiency | | Charging Method (Constant Current) | | | | | Backup | |
|--------------------------|-----------------|-----------------------------------|--|------------|----------|----------|----------|----------|---------------|---------------|------------------------------------|---------------------------|-------------|-------------------------|------------------------|--|--|
| TechnoPower Model | Nominal Voltage | Rated Capacity (Ah) at 20HR (C20) | 20HR (C20) | 10HR (C10) | 7HR (C7) | 5HR (C5) | 3HR (C3) | 1HR (C1) | AH Efficiency | WH Efficiency | Max Charging Current | Cyclic Use (Bulk Voltage) | Standby Use | Float (Trickle) Voltage | Low Voltage Disconnect | Backup Time at 400 Watts at 10.5V 27C ± 10 Min | Average Capacity Loss in storage per month |
| GLORY ASIT 12-165 | 12 V | 150Ah | 150 | 135 | 115 | 100 | 85 | 70 | > 95% | > 82 | 30A | 14.5V | 14.2 V | 13.7 V | 10.5 v | 3H:30M | 4% |
| GLORY ASIT 12-200 | 12 V | 180Ah | 180 | 165 | 150 | 135 | 115 | 81 | > 95% | > 82 | 36A | 14.5V | 14.2 V | 13.7 V | 10.5 v | 4H:15M | 4% |
| GLORY ASIT 12-220 | 12 V | 200Ah | 200 | 180 | 166 | 150 | 127 | 90 | > 95% | > 82 | 40A | 14.5V | 14.2 V | 13.7 V | 10.5 v | 4H:45M | 4% |
| GLORY ASIT 12-250 | 12 V | 230Ah | 220 | 200 | 184 | 166 | 143 | 100 | > 95% | > 82 | 45A | 14.5V | 14.2 V | 13.7 V | 10.5 v | 5H:15M | 4% |

POSITIVES:

1. TECHNOPOWER Tubular plates are also cast with low antimony content which reduces the topping up frequency, making the battery low maintenance type. This also keeps the float charging current at a lower value, thus minimises the total energy requirement needed to keep the battery in charged condition during standby float application

2. Low rate of self discharge: < 4% PER MONTH

3. Electrolyte Level Indicator

4. Very Low Pollution and environment friendly

5. Acid Volume per ampere hour is 35% more than that of ordinary batteries.

Unique features:

The new GLORY AIST series is manufactured as per TECHNOPOWER proprietary unique features

1. New **SLURRY** Filled Tubular Plate Technology

Deep cycle Tubular Ideally designed for cyclic application: Solar systems, and Non-Solar Inverters and UPS Application

2. Ironclad Tubular Technology

3. Optimized Negative paste recipe for fast charge acceptance.

4. Purity: Highest purity LR Grade Sulphuric Acid with Least Iron content.

5. Microporous Ceramic Vent Plugs: Special ceramic vent plugs for controlled acid fumes.

6. "HADI" High pressure robust tubular die-cast spines at 150bar (Torr Tubular) to ensure super fine consistent grain void free structure for protecting the plate support from anodic corrosion, for strength, highest reliability, and higher float life.

7. Super Long life: exceeded 1500 charge/discharge cycles at 80% depth of discharge (DOD)

8. Designed specially to withstand long and frequent power cuts

9. Super Long Backup

10. Ultra Low Maintenance

Applications:

Solar Systems: Home, Industry, street Lighting, and traffic signaling

Solar Photovoltaic Power Plants

Inverters and Home UPS systems

The next generation tubular battery designed specially to withstand long and frequent power cuts. It is the ultimate Inverter battery. In case of power cuts it acts as a backup special source for power supply.

Advantage:

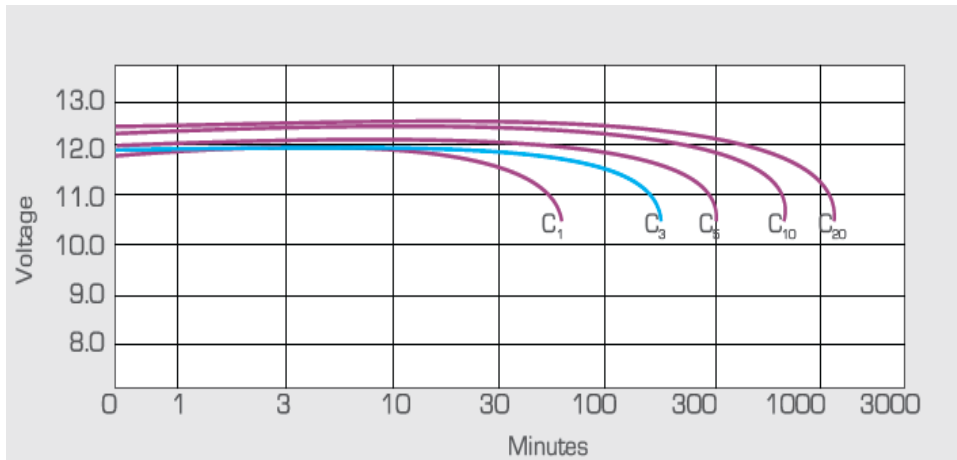
Very long life • User friendly • Acid volume per ampere hour is 30% more than that of ordinary tubular batteries. It acts as a coolant and • Suited for use in areas of frequent power cuts (800 to 1000 cycles of deep discharge as against 300/400 cycles of other batteries) • Can withstand overcharge better • Less pollution, environment friendly • Ensures consistent quality

Equalization

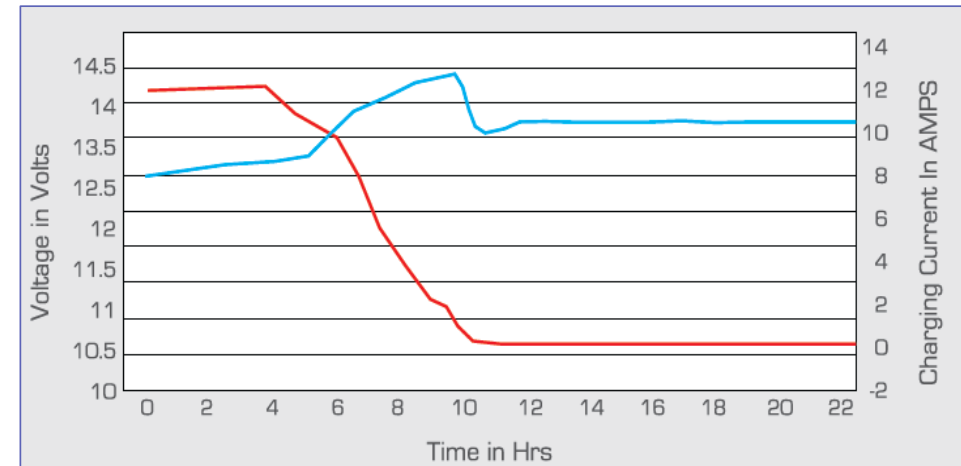
Low constant current (maximum 10% of battery capacity) till charge voltage reaches 16V to 16.5V for equalization and fully charge

Recommended once every 6 months

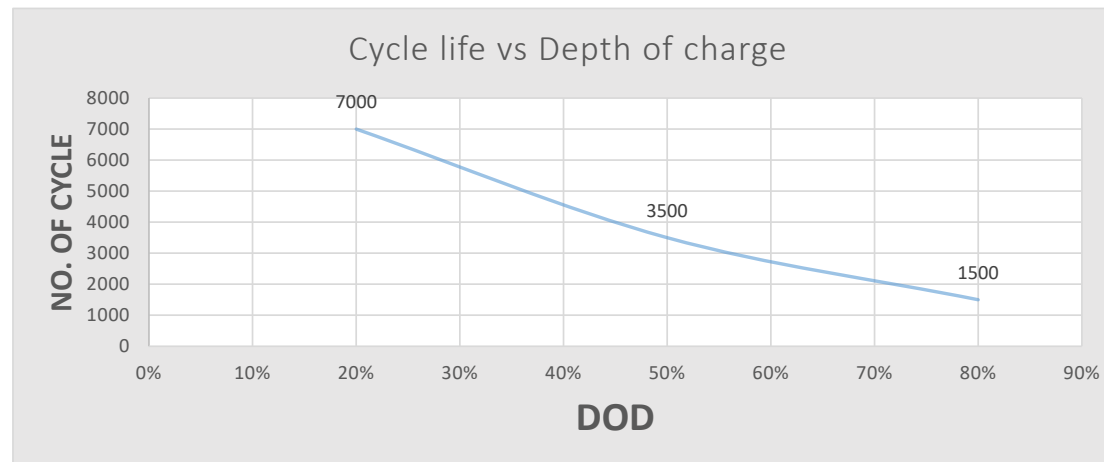
DISCHARGING CHARACTERISTICS at various rates @ 27°C



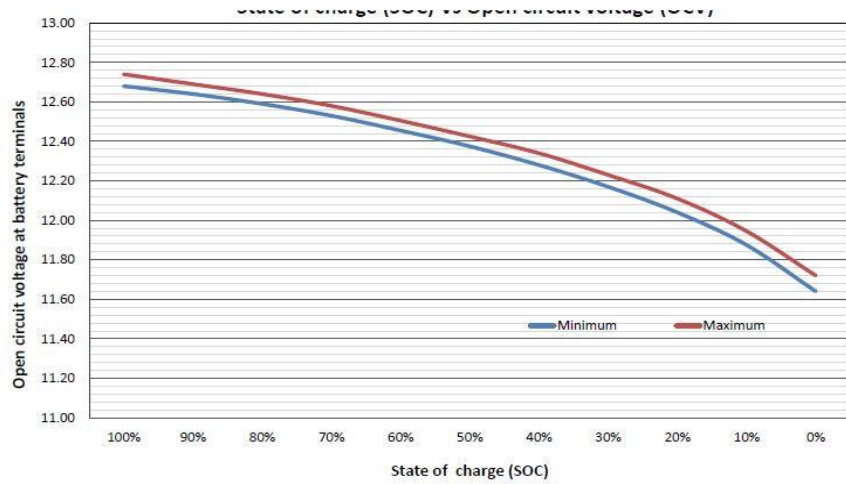
CHARGING CHARACTERISTICS



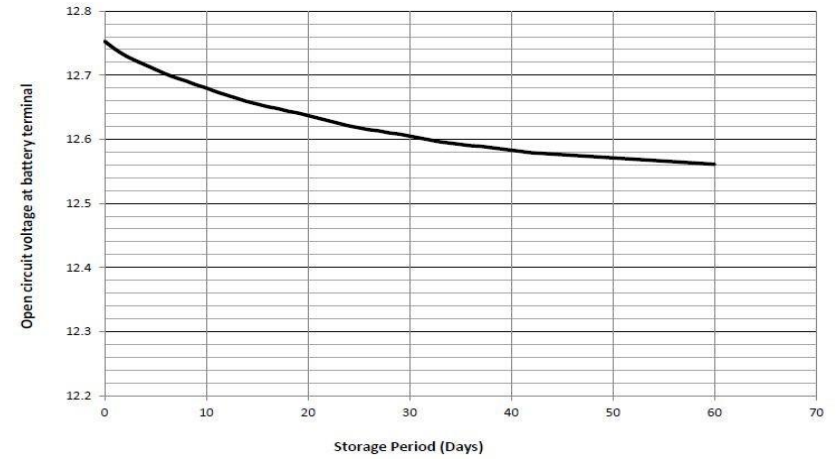
Cycle life VS Depth of charge



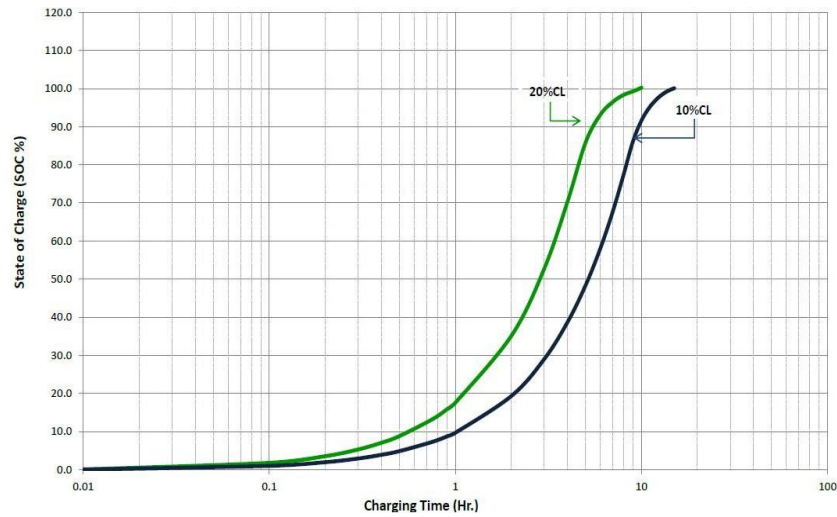
State of charge (SOC) Vs Open Circuit Voltage (V)



Shelf Life Characteristics at 27°C



Constant voltage charging characteristics with 14.4V



Discharge Characteristics

