

# Tubular Gel Battery

## 24 OPzV3000 (2V3000AH)

### Specification

Nominal Voltage	2V	
Capacity	3000.0Ah@10hr to 1.80V/cell	
Dimension	Length	576±3mm (20.7 inches)
	Width	212±3mm (8.35 inches)
	Container Height	772±3mm (30.4 inches)
	Total Height (with Terminal)	807±3mm (31.8 inches)
Approx Weight	Approx 232.0 kg (512lbs)	
Container Material	ABS	
Rated Capacity	3000 AH/300.0A	(10hr, 1.80V/cell, 20°C/68°F)
	2565 AH/513A	(5hr, 1.75V/cell, 20°C/68°F)
	2262 AH/754A	(3hr, 1.75V/cell, 20°C/68°F)
	1697 AH/1697A	(1hr, 1.60V/cell, 20°C/68°F)
Max. Discharge Current	24000A (5s)	
Internal Resistance	Approx 0.18mΩ	
Operating Temp. Range	Discharge	-20~55°C (-4~131°F)
	Charge	0~40°C (32~104°F)
	Storage	-20~50°C (-4~122°F)
Cycle Use	Initial Charging Current less than 750.0A. Voltage	
	2.40V~2.50V at 20°C(68°F)Temp. Coefficient -5mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	2.25V~2.30V at 20°C(68°F)Temp. Coefficient -3mV/°C	
Self-discharge	<2% pre month @ 20°C(68°F)	



### Applications

- ◆ Solar energy, wind energy
- ◆ Electric power, nuclear power
- ◆ Communication
- ◆ Ship, maritime affairs
- ◆ UPS, medical facilities and emergency lighting
- ◆ Situation with high environmental protection and energy-saving
- ◆ Better safety performance and reliability
- ◆ Designed service life of 20 years

### Main Technical Advantages

- ◆ Plate: positive plate adopts tubular plate which can prevent active material falling, and adopts multi-component alloy frame. have fine corrosion-resisting performance and long service life. Negative plate adopts special radiated structure.
- ◆ Separator: adopt special micro-pore PVC-SiO<sub>2</sub> separator from Europe AMER-SIL Company, separator have big porosity and low resistance.
- ◆ Electrolyte: adopts Germany gas silicon dioxide, electrolyte in gel state in the battery without flowing, leakage and lamination can be avoided.
- ◆ Safety valve: adopt Germany technology, constant opening and closing, accumulator case expansion, damage and electrolyte dry up can be avoided.

### Constant Current Discharge (Amperes) at 20 °C (68 °F)

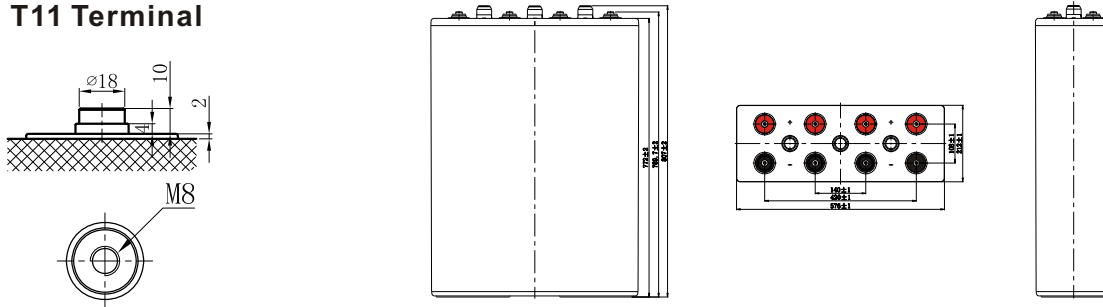
F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	1751	1708	1562	1332	871	677	467	327	281
1.80V/cell	2154	2068	1820	1500	957	737	504	350	300
1.75V/cell	2548	2314	1940	1561	984	754	513	356	305
1.70V/cell	2859	2526	2054	1621	1009	769	521	361	308
1.65V/cell	3071	2667	2136	1668	1031	783	529	365	311
1.60V/cell	3212	2762	2191	1697	1044	793	535	368	314

### Constant Power Discharge (Watts) at 20 °C (68 °F)

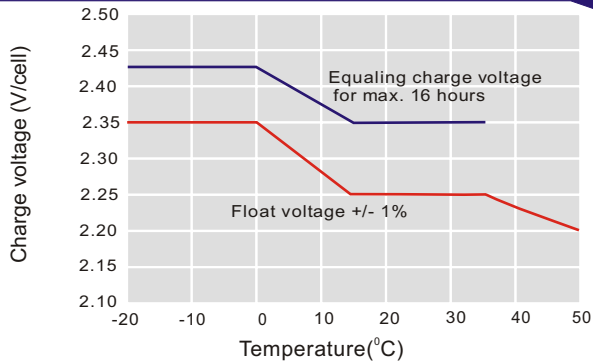
F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	3257	3210	2985	2577	1694	1323	918	648	559
1.80V/cell	3936	3831	3444	2883	1852	1433	987	693	596
1.75V/cell	4576	4228	3634	2981	1893	1460	1002	703	604
1.70V/cell	5045	4548	3807	3076	1932	1483	1015	710	610
1.65V/cell	5320	4731	3920	3143	1963	1504	1026	717	615
1.60V/cell	5460	4828	3979	3177	1979	1515	1033	721	619

# Dimensions

## T11 Terminal

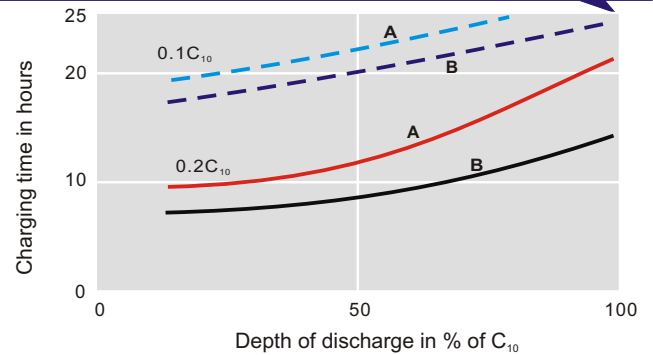


## Discharge Characteristics



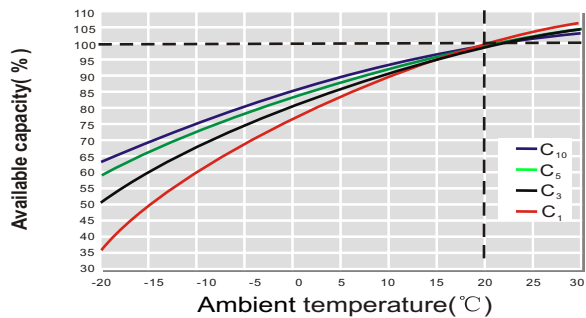
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for continuously different battery ambient temperature.

## Charging Characteristics

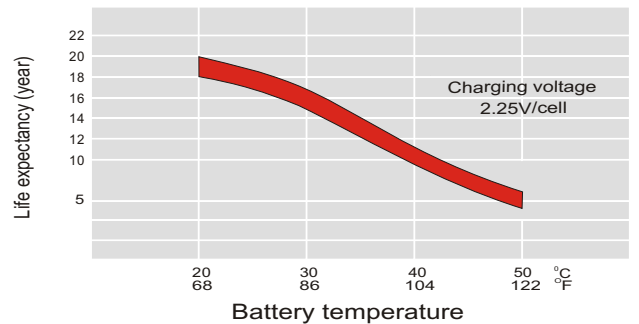


Charge voltage:  
 A—2.25 V/cell      B—2.40 V/cell  
 - - - State of charge 100 %      - - - State of charge 90 %

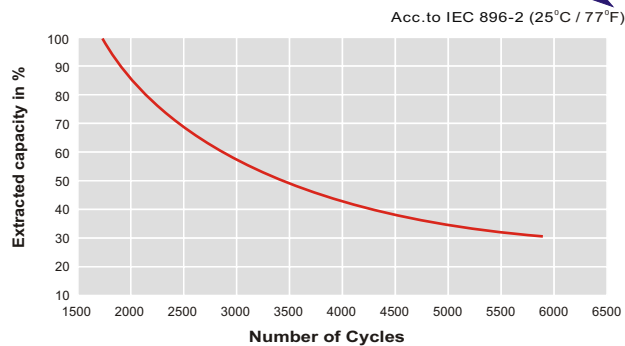
## Temperature Effects in Relation to Battery Capacity



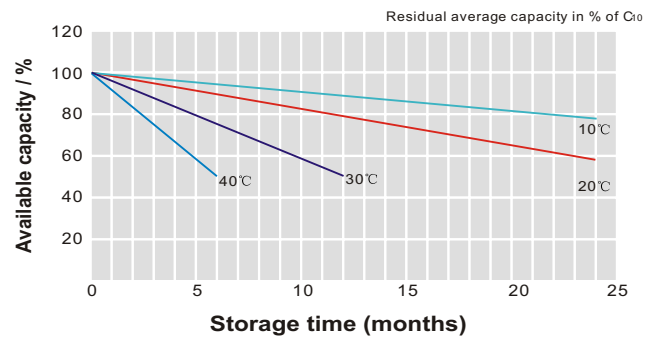
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## General Relation of Capacity VS. Storage Time



## Sales Office

### China sales office:

Add: 5th Floor, Xinbaohui Bldg., Nanshan Blvd.,  
 Nanshan, Shenzhen, China. 518052  
 Tel: +86-755-86036060 (100 lines)  
 Fax: +86-755-26067269  
 E-mail: export@leoch.com

### North America sales office:

Add: 19751 Descartes, Unit A,  
 Foothill Ranch, CA 92610, USA  
 Tel: 949-588-5853  
 Fax: 949-588-5966  
 E-mail: sales@leoch.us

### Europe sales office:

Add: 12C Wheatstone Park, Waterwells  
 Business Park, Gloucester, GL2 2AQ. UK.  
 Tel: +44(0) 1452 751016  
 Fax: +44 (0)1452-690125  
 E-mail: Sales.Europe@leoch.com