

Tubular Gel Battery

5 OPzV250 (2V250AH)

Specification

Nominal Voltage	2V	
Capacity	250.0Ah@10hr to 1.80V/cell	
Dimension	Length	124±2mm (4.88 inches)
	Width	206±3mm (8.11 inches)
	Container Height	355±3mm (14.0 inches)
	Total Height (with Terminal)	390±3mm (15.3 inches)
Approx Weight	Approx 22.0 kg (48.5lbs)	
Container Material	ABS	
Rated Capacity	250 AH/25.0A	(10hr, 1.80V/cell, 20°C/68°F)
	219 AH/43.8A	(5hr, 1.75V/cell, 20°C/68°F)
	194.7 AH/64.9A	(3hr, 1.75V/cell, 20°C/68°F)
	143 AH/143A	(1hr, 1.60V/cell, 20°C/68°F)
Max. Discharge Current	2000A (5s)	
Internal Resistance	Approx 1.1mΩ	
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 62.5A.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-SiO₂ separator from Europe AMER-SIL Company, separator have big porosity and low resistance.
- ◆ Electrolyte: adopts Germany gassilicon 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)

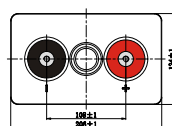
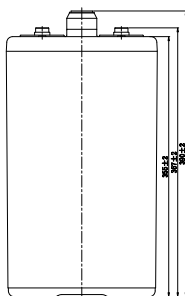
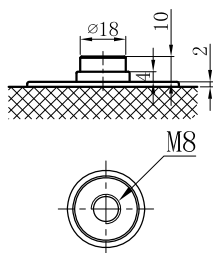
F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	213.0	194.0	153.0	112.0	76.0	58.4	39.9	27.8	23.4
1.80V/cell	263.0	235.0	178.0	126.0	83.5	63.5	43.0	29.8	25.0
1.75V/cell	311.0	263.0	190.0	131.0	85.8	64.9	43.8	30.3	25.4
1.70V/cell	348.0	287.0	201.0	136.0	88.0	66.3	44.5	30.6	25.7
1.65V/cell	374.0	303.0	209.0	140.0	89.9	67.5	45.2	31.0	25.9
1.60V/cell	392.0	314.0	214.0	143.0	91.1	68.3	45.7	31.3	26.1

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

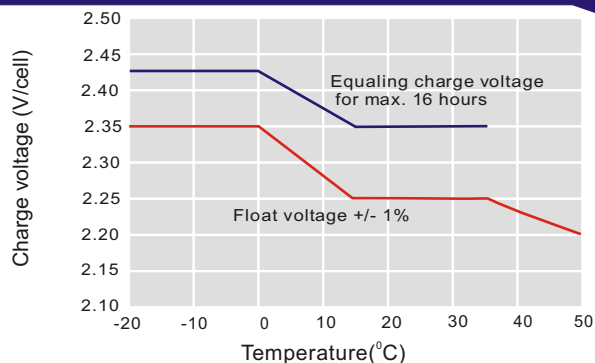
F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	397	365	292	217	148	114	78.4	55.1	46.6
1.80V/cell	480	435	337	243	161	123	84.3	58.8	49.6
1.75V/cell	558	480	355	251	165	126	85.6	59.7	50.4
1.70V/cell	615	517	372	259	168	128	86.7	60.3	50.9
1.65V/cell	648	538	383	265	171	130	87.7	60.9	51.3
1.60V/cell	665	549	389	267	173	130	88.2	61.2	51.6

Dimensions

T11 Terminal

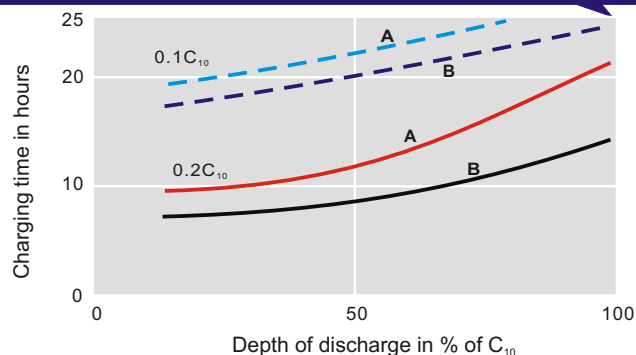


Discharge Characteristics



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

Charging Characteristics



Charge voltage:

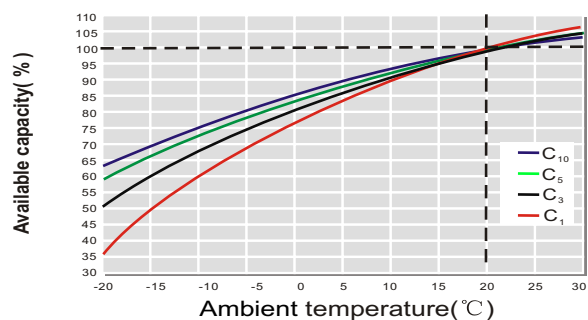
A—2.25 V/cell

B—2.40 V/cell

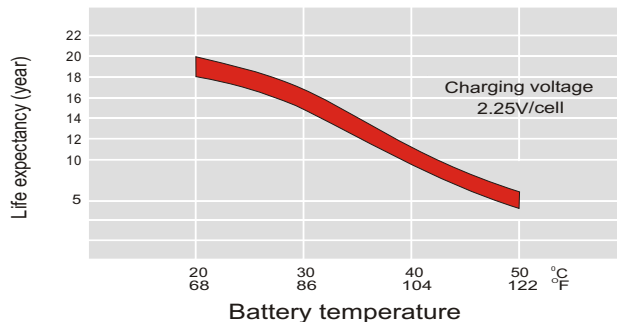
--- State of charge 100 %

— State of charge 90 %

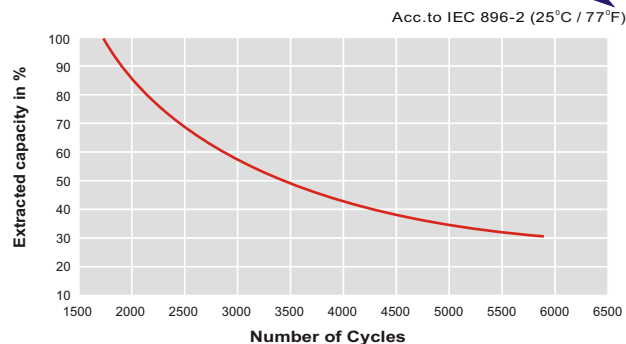
Temperature Effects in Relation to Battery Capacity



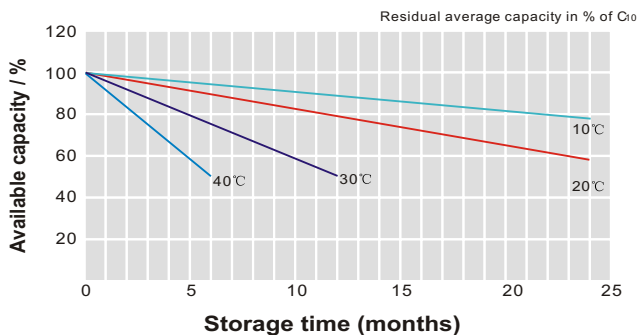
Effect of Temperature on Long Term Float Life



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., Nanhai 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