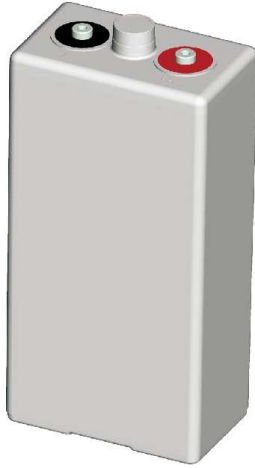




## OPzV250 (2V250AH) Tubular GEL Battery



### 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 A H/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 1.1 mΩ	
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 50.0A. 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 22 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	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

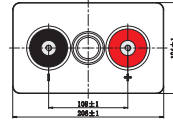
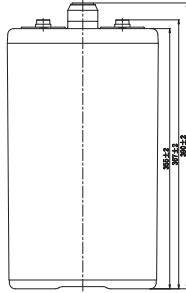
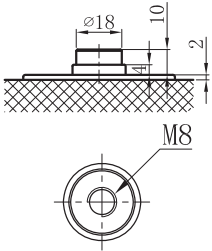
**Note** The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.



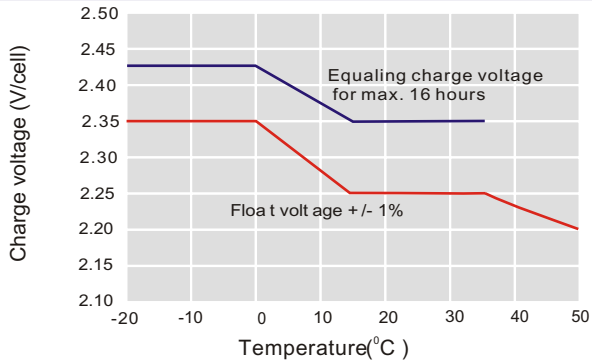
## OPzV250 (2V250AH) Tubular GEL Battery

### Dimensions

#### T11 Terminal

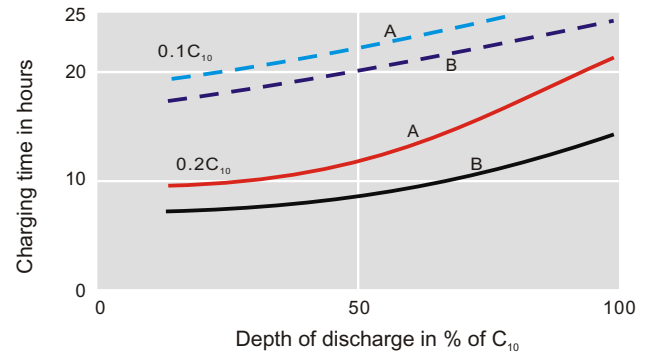


### Discharge Characteristics



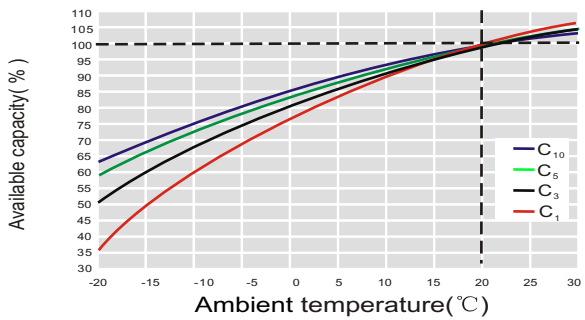
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for continuously different battery ambient temperature.

### Charging Characteristics

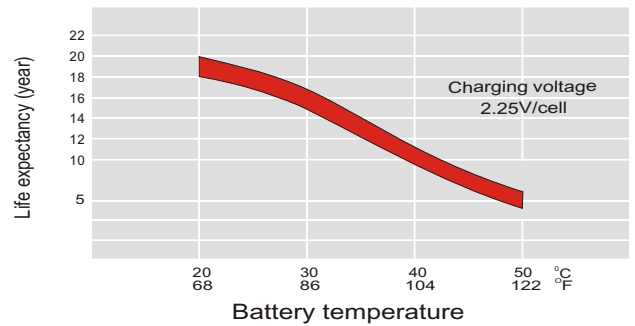


Charge voltage:  
 A—2.25 V/cell      B—2.40 V/cell  
 - - - State of charge 100 %      — State of charge 90 %

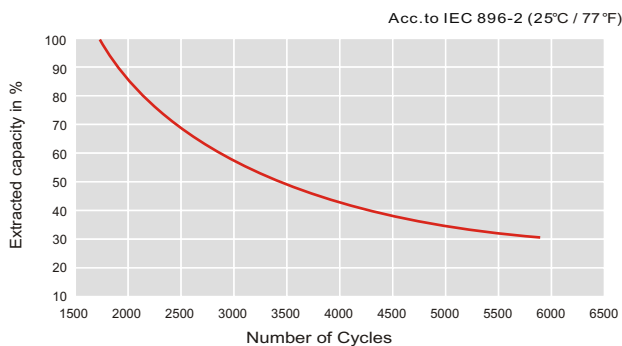
### Temperature Effects in Relation to Battery Capacity



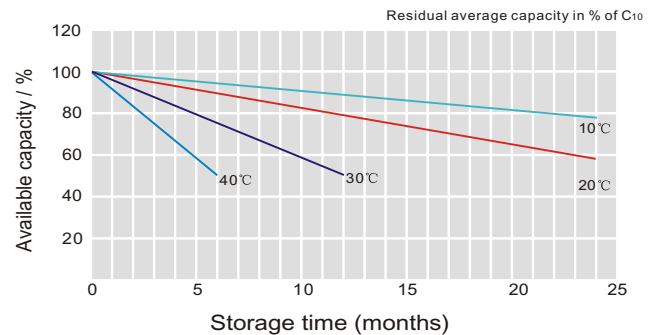
### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### General Relation of Capacity VS. Storage Time



### JYC OPzV BATTERIES

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