



## OPzV1200 (2V1200AH) Tubular GEL Battery



### Specification

Nominal Voltage	2V	
Capacity	1200.0Ah@10hr to 1.80V/cell	
Dimension	Length	275±3mm (10.8 inches)
	Width	210±3mm (8.27 inches)
	Container Height	646±3mm (25.4 inches)
	Total Height (with Terminal)	681±3mm (26.8 inches)
Approx Weight	Approx 80.0 kg (176.37 lbs)	
Container Material	ABS	
Rated Capacity	1200 AH/120.0A	(10hr, 1.80V/cell, 20°C/68°F)
	1035 AH/207A	(5hr, 1.75V/cell, 20°C/68°F)
	915 AH/305A	(3hr, 1.75V/cell, 20°C/68°F)
	681 AH/681A	(1hr, 1.60V/cell, 20°C/68°F)
Max. Discharge Current	9600A (5s)	
Internal Resistance	Approx 0.40 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 300.0A. 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	818	777	670	535	354	274	188	132	112
1.80V/cell	1006	941	780	602	389	298	203	141	120
1.75V/cell	1190	1053	832	626	400	305	207	143	122
1.70V/cell	1336	1149	880	651	410	311	210	145	123
1.65V/cell	1435	1213	915	669	419	317	214	147	125
1.60V/cell	1501	1256	939	681	424	321	216	148	125

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

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	1522	1460	1279	1034	689	535	370	261	224
1.80V/cell	1839	1743	1476	1157	753	580	398	279	238
1.75V/cell	2138	1923	1557	1196	769	591	404	283	242
1.70V/cell	2357	2069	1632	1234	785	600	409	286	244
1.65V/cell	2486	2152	1680	1261	798	608	414	289	246
1.60V/cell	2551	2196	1705	1275	804	613	417	290	248

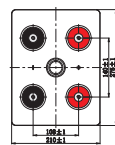
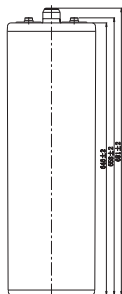
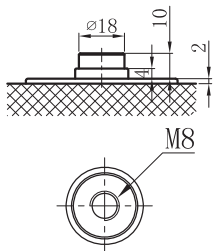
**Note** The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.



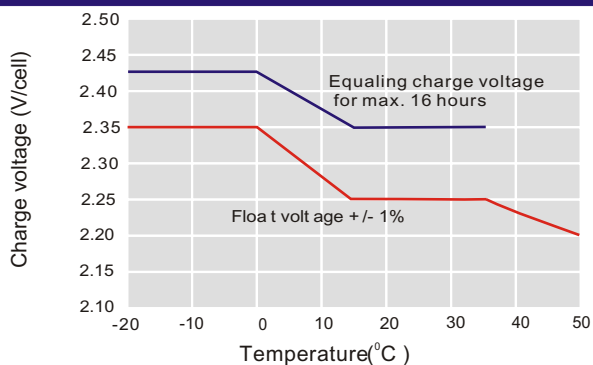
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### Dimensions

#### T11 Terminal

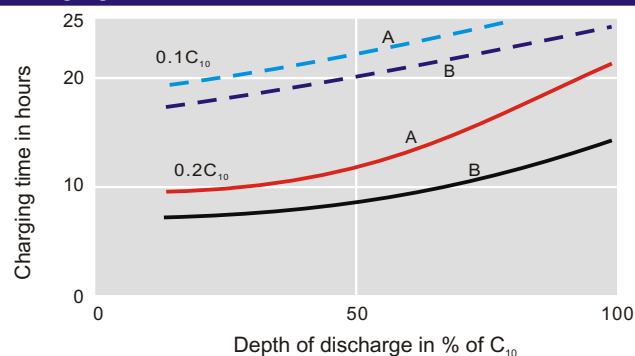


### Discharge Characteristics



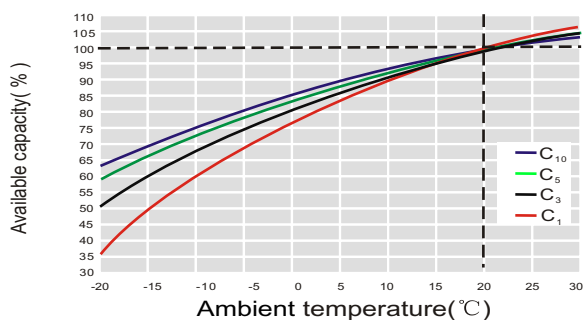
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for continuously different battery ambient temperature.

### Charging Characteristics

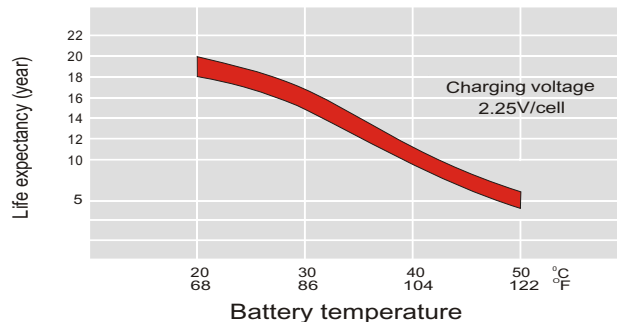


Charge voltage:  
A—2.25 V/cell      B—2.40 V/cell  
-- State of charge 100 %    — State of charge 90 %

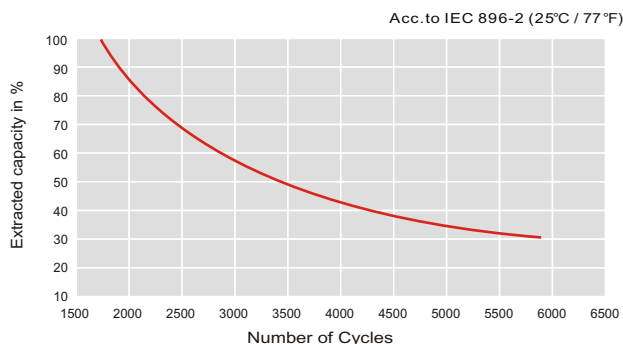
### Temperature Effects in Relation to Battery Capacity



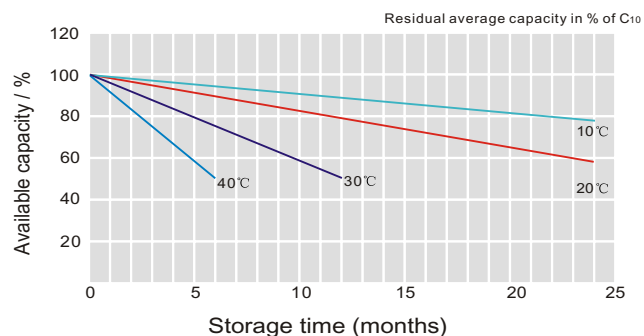
### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### General Relation of Capacity VS. Storage Time



### JYC OPzV BATTERIES

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