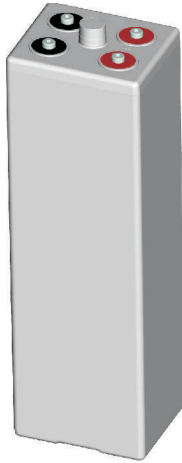




## OPzV1650 (2V1650AH) Tubular GEL Battery



### Specification

Nominal Voltage	2V	
Capacity	1650.0Ah@10hr to 1.80V/cell	
Dimension	Length	275±3mm (10.8 inches)
	Width	210±3mm (8.27 inches)
	Container Height	796±3mm (31.3 inches)
	Total Height (with Terminal)	831±3mm (32.7 inches)
Approx Weight	Approx 117.0 kg (257.94 lbs)	
Container Material	ABS	
Rated Capacity	1650 AH/165.0A	(10hr, 1.80V/cell, 20°C/68°F)
	1402.5 AH/280.5A	(5hr, 1.75V/cell, 20°C/68°F)
	1234.2 AH/411.4A	(3hr, 1.75V/cell, 20°C/68°F)
	925.6 AH/925.6A	(1hr, 1.60V/cell, 20°C/68°F)
Max. Discharge Current	13200A (5s)	
Internal Resistance	Approx 0.29 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 312.5A. Voltage 2.40V~2.50V at 20°C(68°F)Temp. Coefficient -5mV/°C	
	No limit on Initial Charging Current Voltage 2.25V~2.30V at 20°C(68°F)Temp. Coefficient -3mV/°C	
Standby Use		
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	876	854	781	666	436	339	233	164	140
1.80V/cell	1077	1034	910	750	479	369	252	175	150
1.75V/cell	1274	1157	970	781	492	377	257	178	152
1.70V/cell	1430	1263	1027	811	504	385	261	180	154
1.65V/cell	1535	1333	1068	834	515	392	265	183	156
1.60V/cell	1606	1381	1095	849	522	396	267	184	157

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

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	1629	1605	1492	1288	847	661	459	324	279
1.80V/cell	1968	1916	1722	1442	926	717	493	346	298
1.75V/cell	2288	2114	1817	1491	946	730	501	351	302
1.70V/cell	2522	2274	1903	1538	966	742	507	355	305
1.65V/cell	2660	2365	1960	1572	981	752	513	359	308
1.60V/cell	2730	2414	1989	1588	989	757	517	360	309

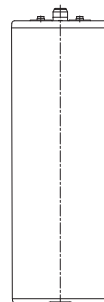
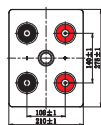
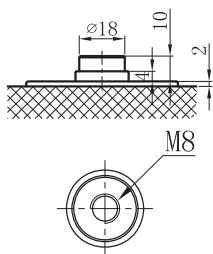
**Note** The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.



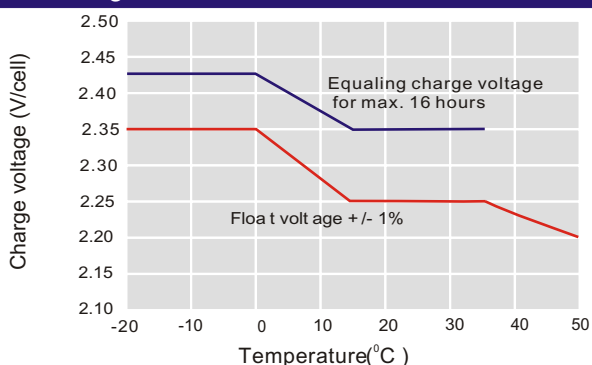
## OPzV1650 (2V1650AH) Tubular GEL Battery

### Dimensions

#### T11 Terminal

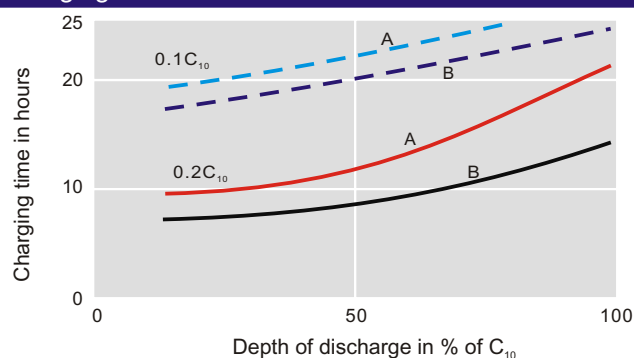


### Discharge Characteristics



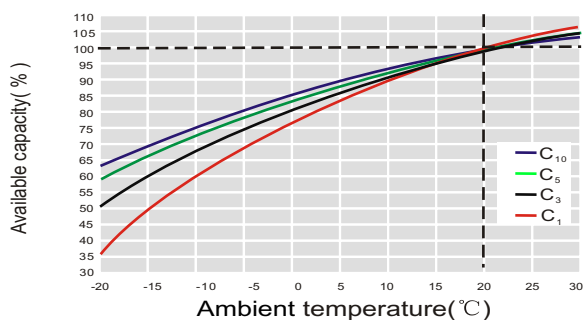
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for continuously different battery ambient temperature.

### Charging Characteristics

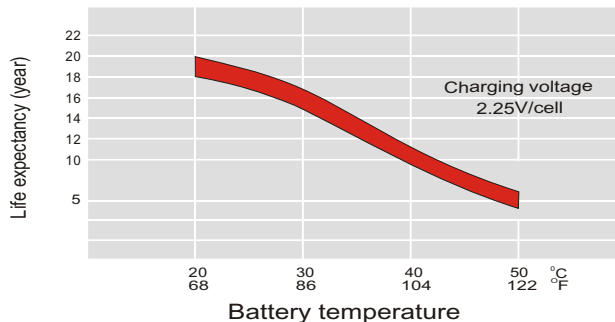


Charge voltage:  
 A—2.25 V/cell      B—2.40 V/cell  
 - - - State of charge 100 %      — State of charge 90 %

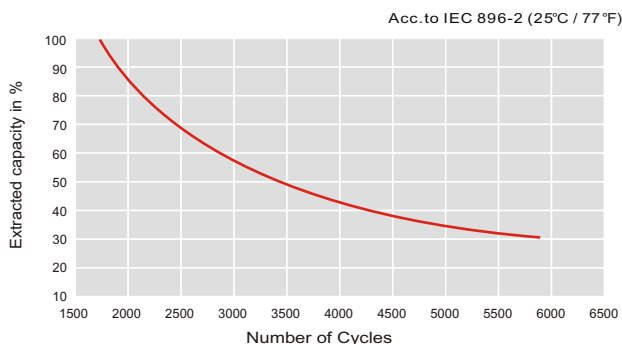
### Temperature Effects in Relation to Battery Capacity



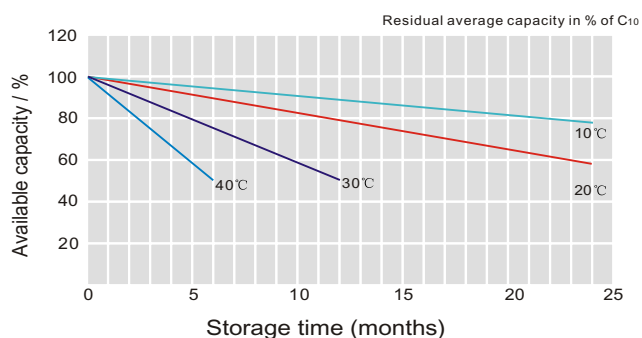
### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### General Relation of Capacity VS. Storage Time



### JYC OPzV BATTERIES

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