

# 5 OPzV250 (2V250AH)

## Applications

- ◆ Telecom application (indoor or outdoor BTS)
- ◆ Solar System
- ◆ Wind system
- ◆ Hybrid solution



## Design

- ◆ Positive plate: Tubular plate, adopts multi-component alloy frame
- ◆ negative plate: special radiated structure
- ◆ Electrolyte: sulphuric acid fixed as GEL by fumed silica
- ◆ Separator: special microporous PVC-SiO<sub>2</sub> separator
- ◆ Safety valve: valve with flame arrestor

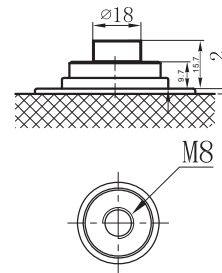
## Features

- ◆ Long life: 20 years design life
- ◆ Good deep discharge resilience performance
- ◆ Special plate design, long cycle lifetime
- ◆ High thermal capacity, reduce the risk of thermal out of control and drying hard, can be used in bad environment
- ◆ Flame retardant container UL94-V0

### Terminal

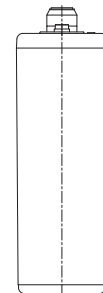
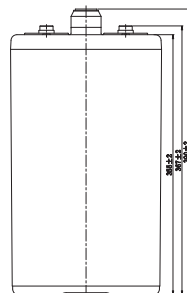
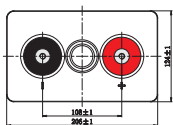
Terminal Model:

Unit: mm



### Layout

Unit: mm



## Tubular GEL Battery-OPzV Series

### Specification

Nominal Voltage	2V	
Rated Capacity (Ah)	250.0 AH/25.0A	(10hr, 1.80V/cell, 25°C)
	194.7 AH/64.9A	(3hr, 1.75V/cell, 25°C)
	143.0 AH/143.0A	(1hr, 1.60V/cell, 25°C)
Dimension	Length	124 ± 2mm
	Width	206 ± 2mm
	Container Height	355 ± 2mm
	Total Height	390 ± 2mm
Approx Weight	Approx 22.0 kg	
Terminal	Material: Copper	
Container Material	ABS	
Max. Discharge Current	2000A (5s)	
Internal Resistance	Approx 1.10mΩ	
Operating Temp. Range	Discharge: -20~55°C Charge: 0~40°C Storage: -20~50°C	
Capacity Affected by Temperature	40°C	103%
	25°C	100%
	0°C	86%
Cycle Use	Initial Charging Current less than 62.5A.	
	Voltage: 2.4V at 25°C	Temp. coefficient -5mV/°C
Standby Use	Equalization voltage: 2.35V at 25°C	Temp. coefficient -3mV/°C
	Float voltage: 2.25V at 25°C	Temp. coefficient -3mV/°C
Self Discharge	<2% per month @ 25°C.	



ISO9001



ISO14001

### Performance

#### Constant Current Discharge (Amperes) at 25 °C (77°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

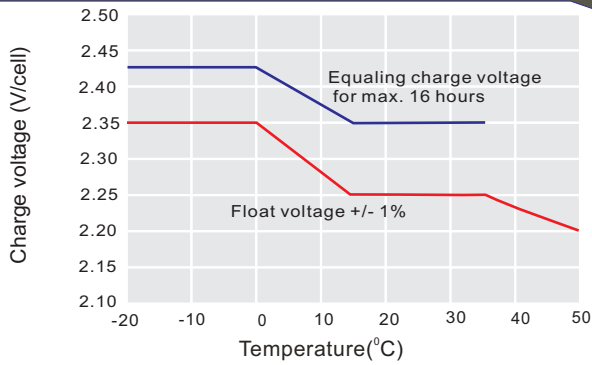
#### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

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

**Tubular GEL Battery-OPzV Series**

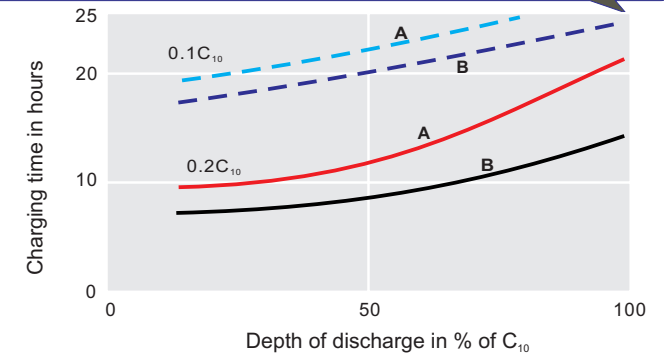
**Characteristic Curve**

**Discharge Characteristics**



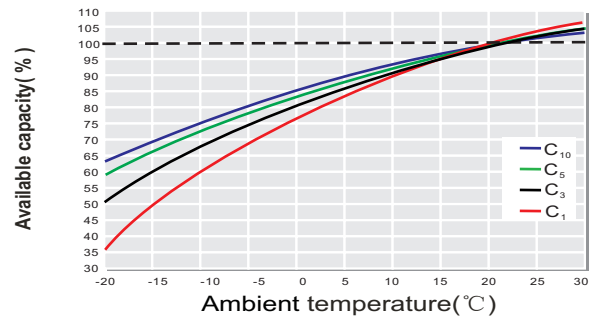
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for continuously different battery ambient temperature.

**Charging Characteristics**

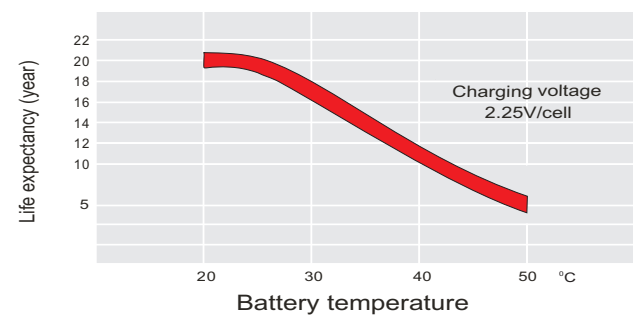


Charge voltage:  
A—2.25 V/cell      B—2.40 V/cell  
--- State of charge 100 %      — State of charge 90 %

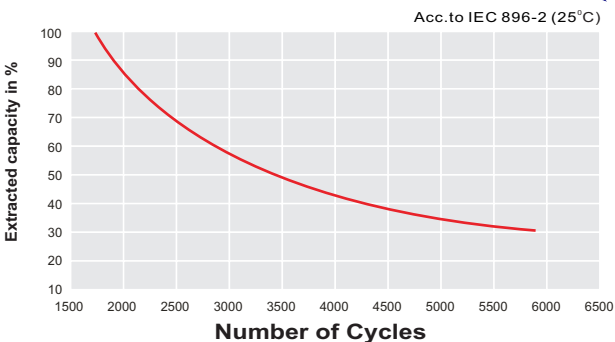
**Temperature Effects in Relation to Battery Capacity**



**Effect of Temperature on Long Term Float Life**



**Cycle Life in Relation to Depth of Discharge**



**General Relation of Capacity VS. Storage Time**

