

# 12 OPzV1200 (2V1200AH)

## 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

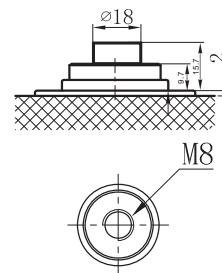
## Features

- ◆ 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

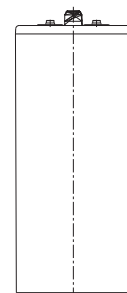
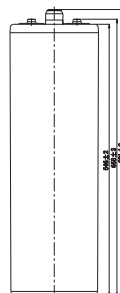
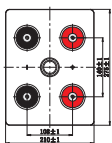
Terminal Model:

Unit: mm



### Layout

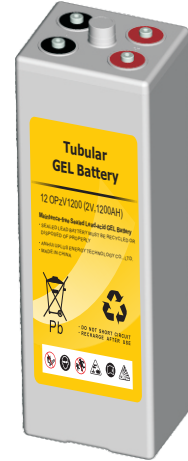
Unit: mm



## Tubular GEL Battery-OPzV Series

### Specification

Nominal Voltage	2V	
Rated Capacity (Ah)	1200.0 AH/120.0A	(10hr, 1.80V/cell, 25°C)
	915.0 AH/305.0A	(3hr, 1.75V/cell, 25°C)
	681.0 AH/681.0A	(1hr, 1.60V/cell, 25°C)
Dimension	Length	275 ± 2mm
	Width	210 ± 2mm
	Container Height	646 ± 2mm
	Total Height	681 ± 2mm
Approx Weight	Approx 93.0 kg	
Terminal	Material: Copper	
Container Material	ABS	
Max. Discharge Current	9600A (5s)	
Internal Resistance	Approx 0.4mΩ	
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 300.0A.	
	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	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

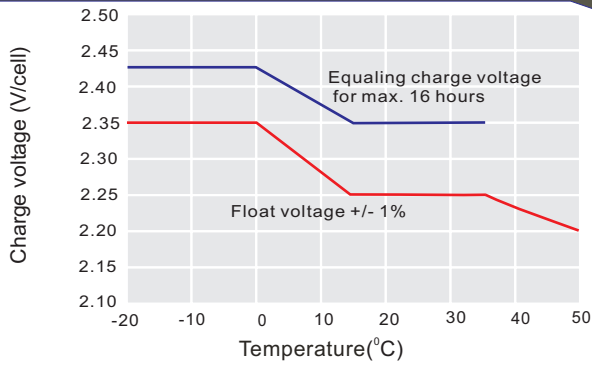
#### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

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

**Tubular GEL Battery-OPzV Series**

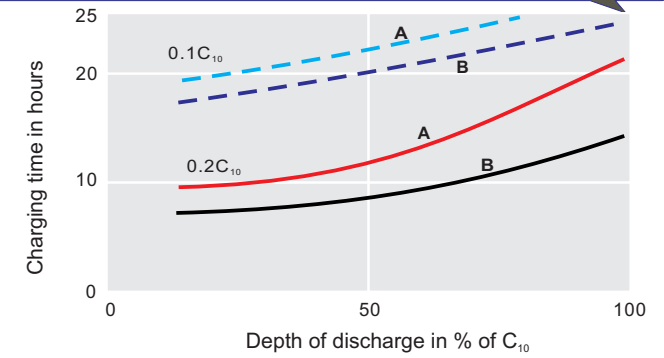
**Characteristic Curve**

**Discharge Characteristics**



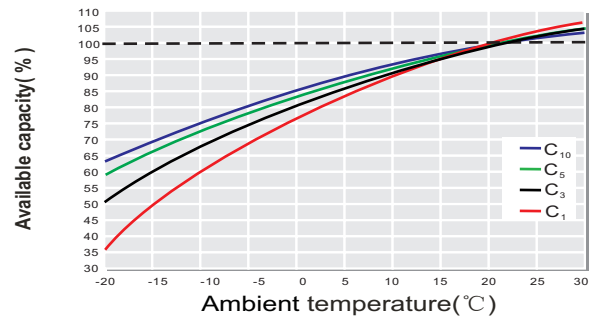
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for accontinuously different battery ambient temperature.

**Charging Characteristics**

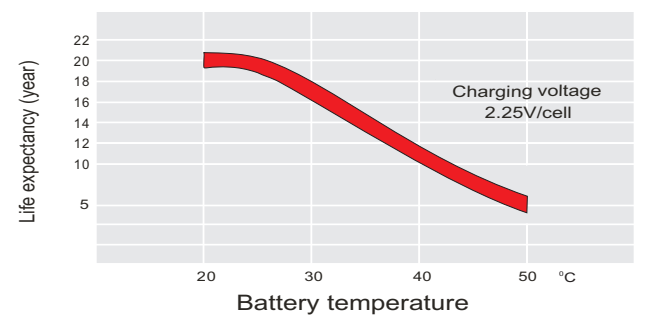


Charge voltage:  
A—2.25 V/cell      B—2.40 V/cell  
--- State of charge 100 %      — State of charge 90 %

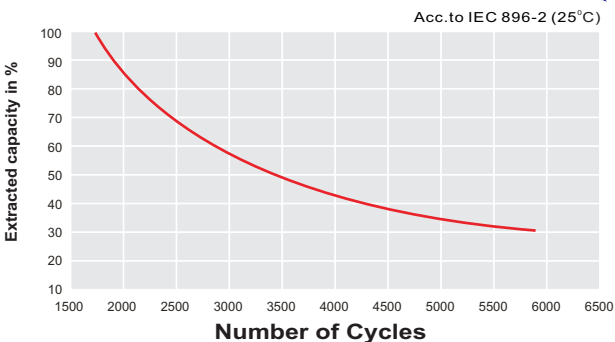
**Temperature Effects in Relation to Battery Capacity**



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



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



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

