

# 6 OPzV600 (2V600AH)

## 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

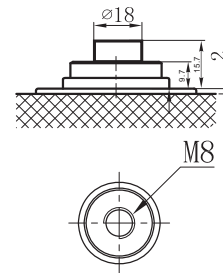
## Features

- ◆ 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

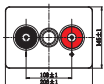
Terminal Model:

Unit: mm



### Layout

Unit: mm



## Tubular GEL Battery-OPzV Series

### Specification

Nominal Voltage	2V	
Rated Capacity (Ah)	600.0 AH/60.0A	(10hr, 1.80V/cell, 25°C)
	456.0 AH/152.0A	(3hr, 1.75V/cell, 25°C)
	341.0 AH/341.0A	(1hr, 1.60V/cell, 25°C)
Dimension	Length	145 ± 2mm
	Width	206 ± 2mm
	Container Height	646 ± 2mm
	Total Height	681 ± 2mm
Approx Weight	Approx 46.0 kg	
Terminal	Material: Copper	
Container Material	ABS	
Max. Discharge Current	4800A (5s)	
Internal Resistance	Approx 0.62mΩ	
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 150.0A.	
	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	409	389	335	267	177	137	94.2	65.8	56.2
1.80V/cell	503	470	390	301	195	149	102	70.5	60.0
1.75V/cell	595	526	416	313	200	152	104	71.7	60.9
1.70V/cell	668	574	440	325	205	156	105	72.6	61.6
1.65V/cell	717	607	458	335	209	158	107	73.5	62.3
1.60V/cell	750	628	469	341	212	160	108	74.1	62.7

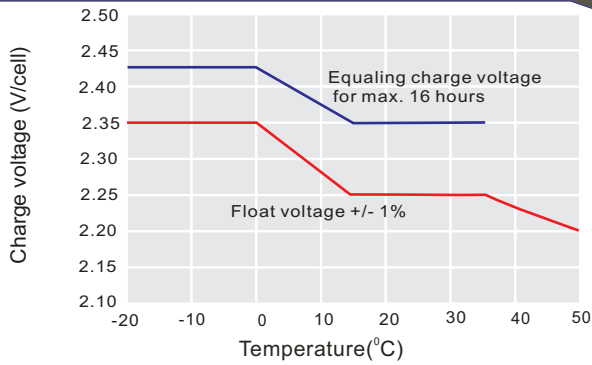
#### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	761	730	640	517	344	268	185	130	112
1.80V/cell	919	871	738	578	376	290	199	139	119
1.75V/cell	1069	962	779	598	385	295	202	141	121
1.70V/cell	1178	1034	816	617	393	300	205	143	122
1.65V/cell	1243	1076	840	631	399	304	207	144	123
1.60V/cell	1276	1098	853	637	402	306	208	145	124

**Tubular GEL Battery-OPzV Series**

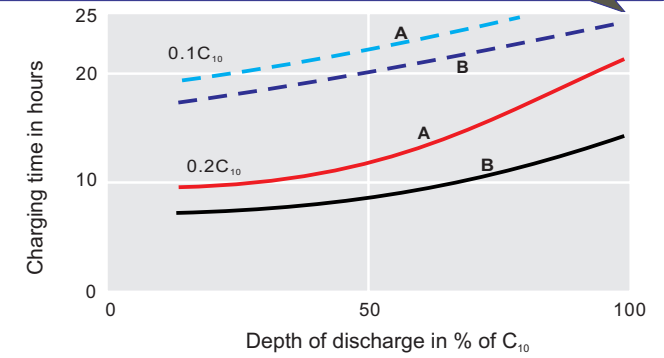
**Characteristic Curve**

**Discharge Characteristics**



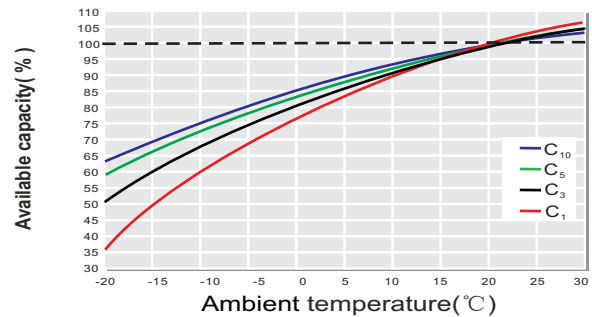
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for accontinuously different battery ambient temperature.

**Charging Characteristics**

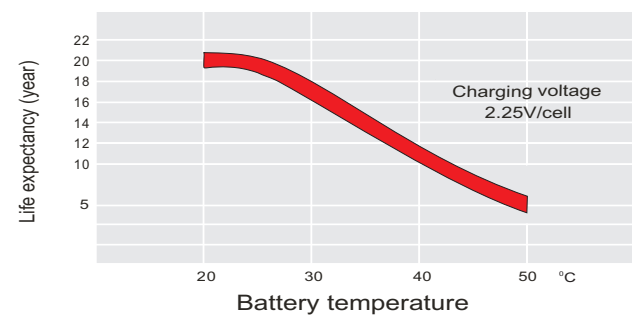


Charge voltage:  
A—2.25 V/cell      B—2.40 V/cell  
--- State of charge 100 %      — State of charge 90 %

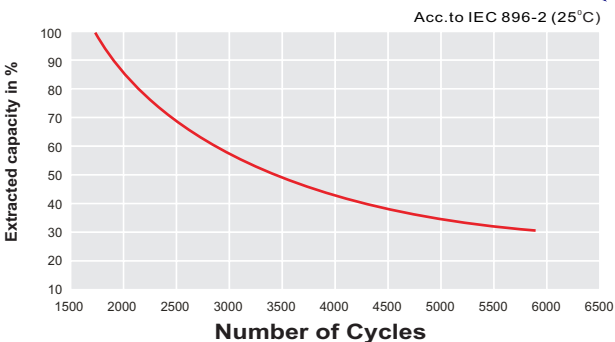
**Temperature Effects in Relation to Battery Capacity**



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



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



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

