

6 OPzV300 (2V300AH)

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-SiO₂ separator
- ◆ Safety valve: valve with flame arrestor

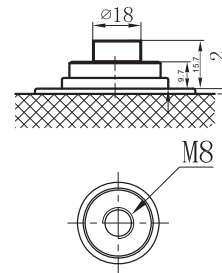
Features

- ◆ 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

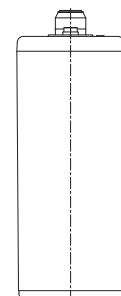
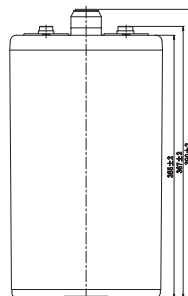
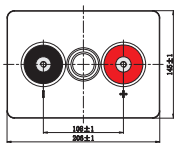
Terminal Model:

Unit: mm



Layout

Unit: mm



Tubular GEL Battery-OPzV Series

Specification

Nominal Voltage	2V	
Rated Capacity (Ah)	300.0 AH/30.0A	(10hr, 1.80V/cell, 25°C)
	233.7 AH/77.9A	(3hr, 1.75V/cell, 25°C)
	171.0 AH/171.0A	(1hr, 1.60V/cell, 25°C)
Dimension	Length	145 ± 2mm
	Width	206 ± 2mm
	Container Height	355 ± 2mm
	Total Height	390 ± 2mm
Approx Weight	Approx 26.0 kg	
Terminal	Material: Copper	
Container Material	ABS	
Max. Discharge Current	2400A (5s)	
Internal Resistance	Approx 1.0mΩ	
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 75.0A.	
	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	256	233	183	135	91.2	70.0	47.8	33.3	28.1
1.80V/cell	315	282	214	152	100	76.2	51.6	35.7	30.0
1.75V/cell	373	316	228	158	103	77.9	52.6	36.3	30.5
1.70V/cell	418	344	241	164	106	79.5	53.4	36.8	30.8
1.65V/cell	449	364	251	168	108	81.0	54.2	37.2	31.1
1.60V/cell	470	377	257	171	109	81.9	54.8	37.5	31.4

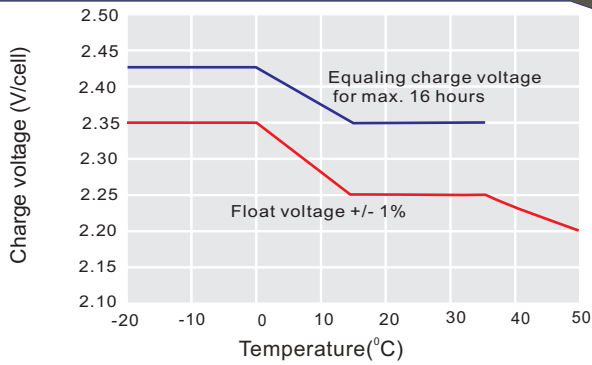
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	476	438	350	260	177	137	94.1	66.1	55.9
1.80V/cell	576	522	404	291	194	148	101	70.6	59.6
1.75V/cell	669	577	426	301	198	151	103	71.7	60.4
1.70V/cell	738	620	447	311	202	153	104	72.4	61.0
1.65V/cell	778	645	460	317	205	155	105	73.1	61.5
1.60V/cell	799	658	467	321	207	157	106	73.5	61.9

Tubular GEL Battery-OPzV Series

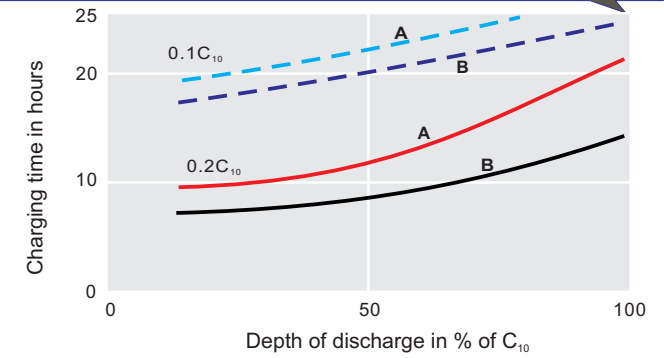
Characteristic Curve

Discharge Characteristics



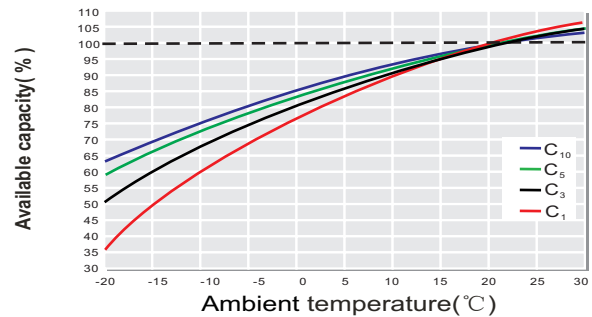
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for continuously different battery ambient temperature.

Charging Characteristics

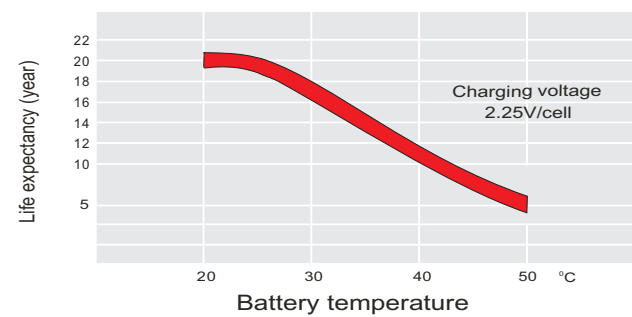


Charge voltage:
A—2.25 V/cell B—2.40 V/cell
--- State of charge 100 % — State of charge 90 %

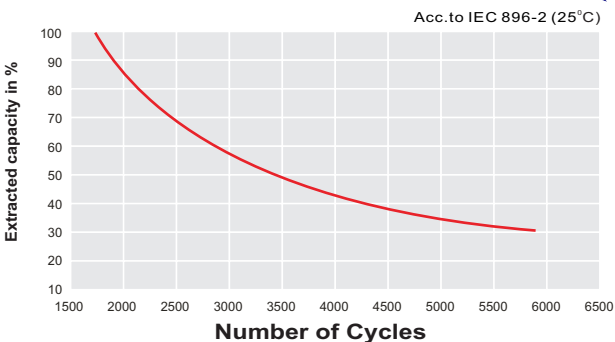
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time

