

5 OPzV350 (2V350AH)

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

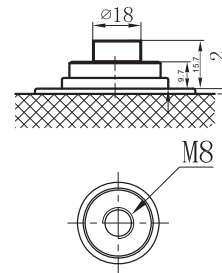
Features

- ◆ 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

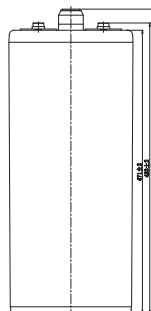
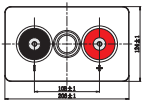
Terminal Model:

Unit: mm



Layout

Unit: mm



Tubular GEL Battery-OPzV Series

Specification

Nominal Voltage	2V	
Rated Capacity (Ah)	350.0 AH/35.0A	(10hr, 1.80V/cell, 25°C)
	270.3 AH/90.1A	(3hr, 1.75V/cell, 25°C)
	199.0 AH/199.0A	(1hr, 1.60V/cell, 25°C)
Dimension	Length	124 ± 2mm
	Width	206 ± 2mm
	Container Height	471 ± 2mm
	Total Height	506 ± 2mm
Approx Weight	Approx 29.0 kg	
Terminal	Material: Copper	
Container Material	ABS	
Max. Discharge Current	2800A (5s)	
Internal Resistance	Approx 0.90mΩ	
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 87.5A.	
	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	274	253	206	157	105	81.0	55.5	38.7	32.8
1.80V/cell	337	306	240	176	115	88.1	59.8	41.4	35.0
1.75V/cell	399	343	256	183	119	90.1	61.0	42.1	35.6
1.70V/cell	448	374	271	191	122	91.9	61.9	42.7	36.0
1.65V/cell	481	395	282	196	124	93.6	62.9	43.2	36.3
1.60V/cell	503	409	289	199	126	94.7	63.5	43.5	36.6

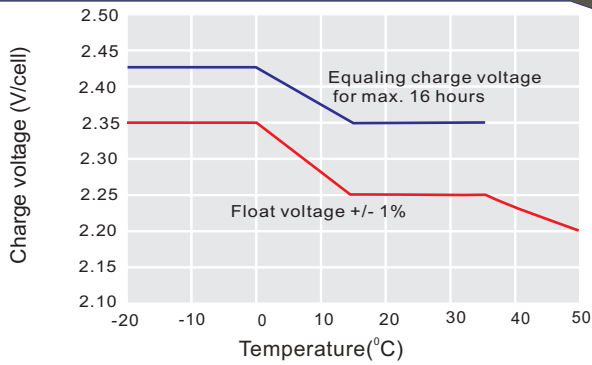
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	510	475	394	303	204	158	109	76.7	65.2
1.80V/cell	616	567	455	339	223	171	117	82.0	69.5
1.75V/cell	717	626	480	350	228	174	119	83.2	70.5
1.70V/cell	790	673	503	362	233	177	121	84.1	71.2
1.65V/cell	833	700	518	369	237	180	122	84.9	71.8
1.60V/cell	855	715	526	373	239	181	123	85.3	72.2

Tubular GEL Battery-OPzV Series

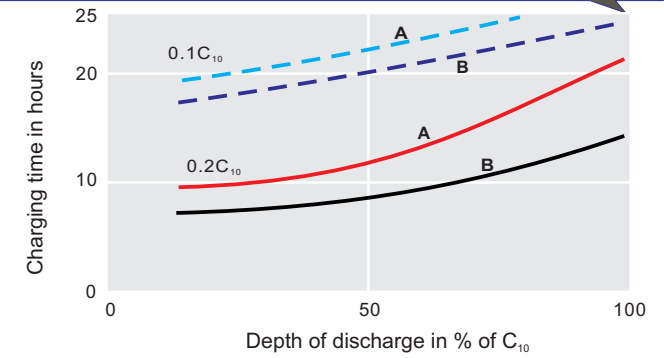
Characteristic Curve

Discharge Characteristics



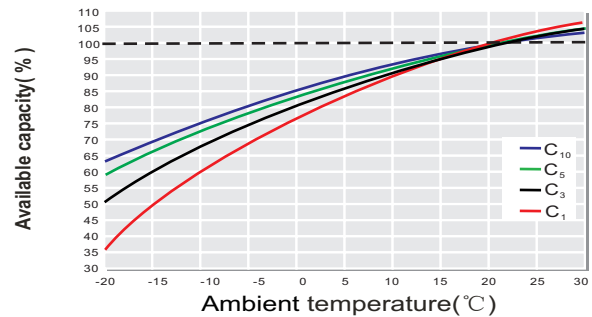
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for continuously different battery ambient temperature.

Charging Characteristics

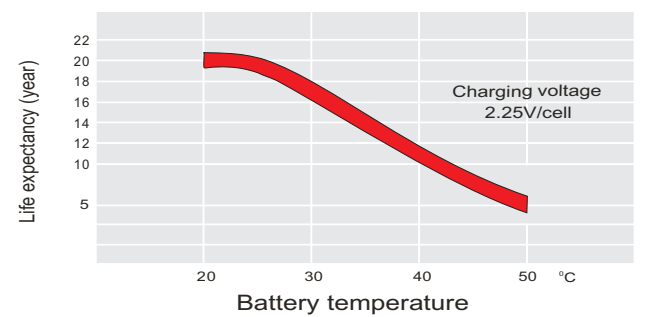


Charge voltage:
A—2.25 V/cell B—2.40 V/cell
--- State of charge 100 % — State of charge 90 %

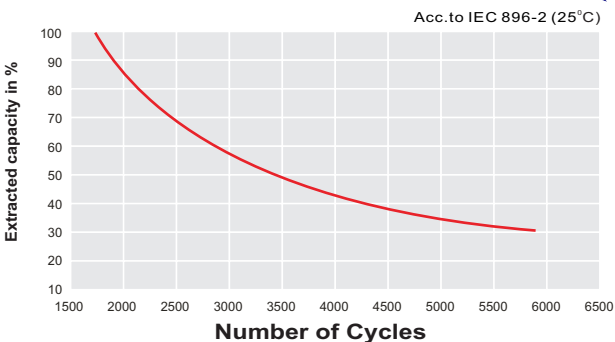
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time

