

4 OPzV200 (2V200AH)

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

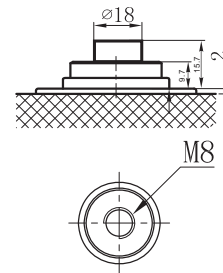
Features

- ◆ 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

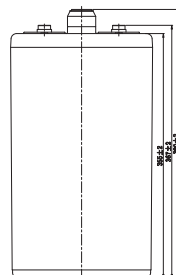
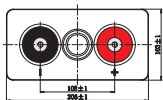
Terminal Model:

Unit: mm



Layout

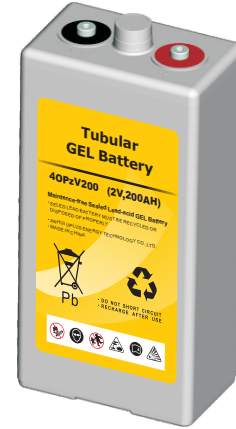
Unit: mm



Tubular GEL Battery-OPzV Series

Specification

Nominal Voltage	2V	
Rated Capacity (Ah)	200.0 AH/20.0A	(10hr, 1.80V/cell, 25°C)
	155.7 AH/51.9A	(3hr, 1.75V/cell, 25°C)
	114.0 AH/114.0A	(1hr, 1.60V/cell, 25°C)
Dimension	Length	103 ± 2mm
	Width	206 ± 2mm
	Container Height	355 ± 2mm
	Total Height	390 ± 2mm
Approx Weight	Approx 18.0 kg	
Terminal	Material: Copper	
Container Material	ABS	
Max. Discharge Current	1600A (5s)	
Internal Resistance	Approx 1.20mΩ	
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 50.0A.	
	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	171.0	155.0	122.0	89.7	60.8	46.7	31.9	22.2	18.7
1.80V/cell	210.0	188.0	142.0	101.0	66.8	50.8	34.4	23.8	20.0
1.75V/cell	248.0	210.0	152.0	105.0	68.6	51.9	35.1	24.2	20.3
1.70V/cell	279.0	230.0	161.0	109.0	70.4	53.0	35.6	24.5	20.5
1.65V/cell	299.0	242.0	167.0	112.0	71.9	54.0	36.2	24.8	20.8
1.60V/cell	313.0	251.0	171.0	114.0	72.8	54.6	36.5	25.0	20.9

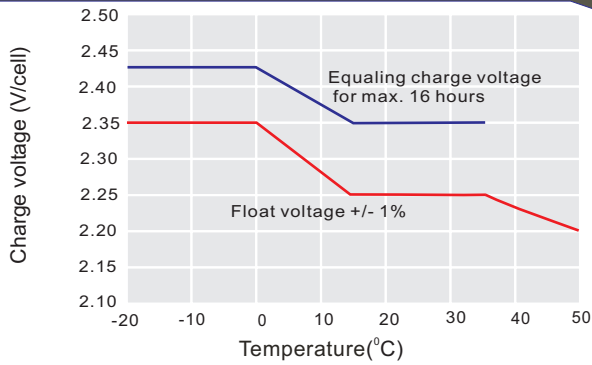
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	318	292	233	174	118	91.2	62.7	44.1	37.3
1.80V/cell	384	348	269	194	129	98.8	67.4	47.1	39.7
1.75V/cell	446	384	284	201	132	101	68.5	47.8	40.3
1.70V/cell	492	413	298	207	135	102	69.3	48.3	40.7
1.65V/cell	519	430	307	212	137	104	70.1	48.7	41.0
1.60V/cell	532	439	311	214	138	104	70.6	49.0	41.3

Tubular GEL Battery-OPzV Series

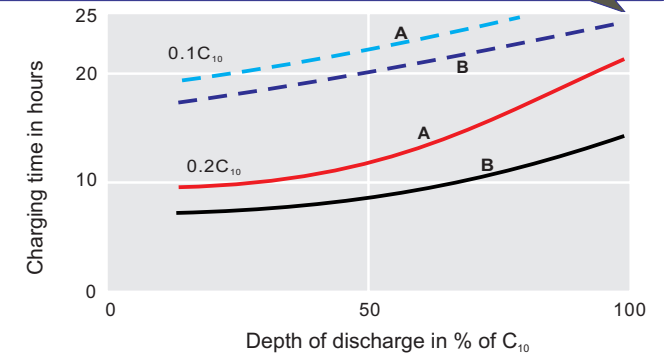
Characteristic Curve

Discharge Characteristics



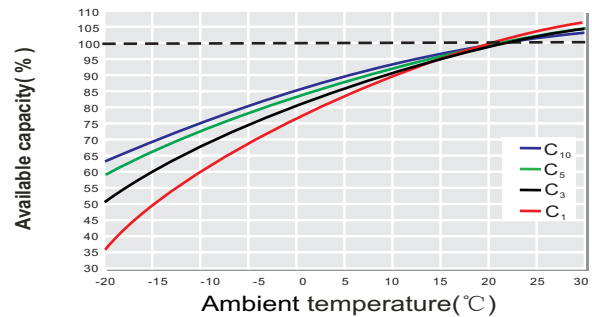
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for continuously different battery ambient temperature.

Charging Characteristics

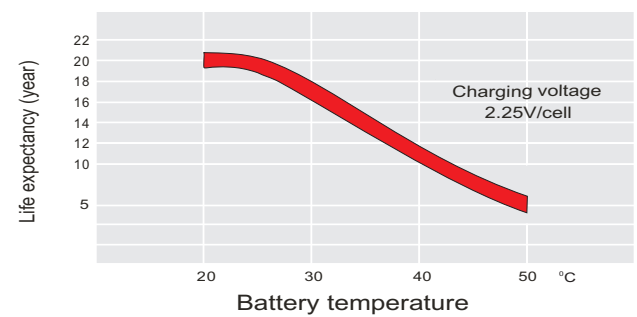


Charge voltage:
A—2.25 V/cell B—2.40 V/cell
--- State of charge 100 % — State of charge 90 %

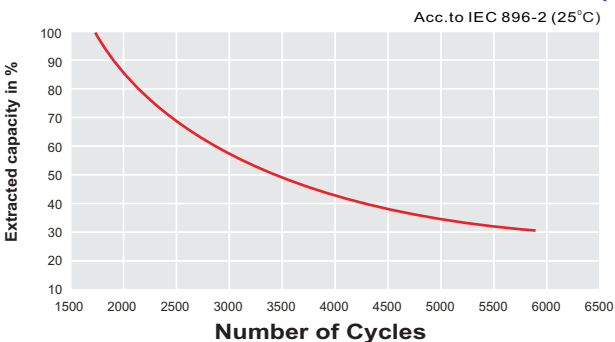
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time

