

12 OPzV1500 (2V1500AH)

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

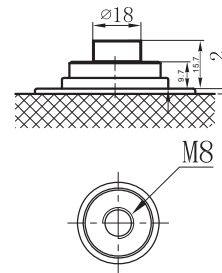
Features

- ◆ 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

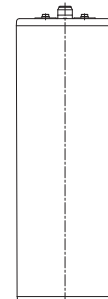
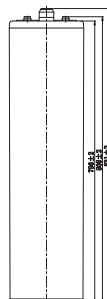
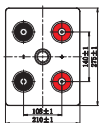
Terminal Model:

Unit: mm



Layout

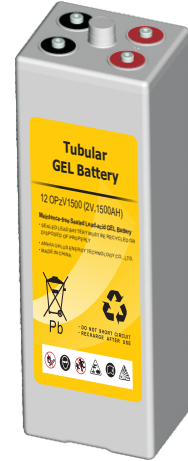
Unit: mm



Tubular GEL Battery-OPzV Series

Specification

Nominal Voltage	2V	
Rated Capacity (Ah)	1500.0 AH/150.0A	(10hr, 1.80V/cell, 25°C)
	1131.0 AH/377.0A	(3hr, 1.75V/cell, 25°C)
	849.0 AH/849.0A	(1hr, 1.60V/cell, 25°C)
Dimension	Length	275 ± 2mm
	Width	210 ± 2mm
	Container Height	796 ± 2mm
	Total Height	831 ± 2mm
Approx Weight	Approx 115.0 kg	
Terminal	Material: Copper	
Container Material	ABS	
Max. Discharge Current	12000A (5s)	
Internal Resistance	Approx 0.3mΩ	
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 375.0A.	
	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	876	854	781	666	436	339	233	164	140
1.80V/cell	1077	1034	910	750	479	369	252	175	150
1.75V/cell	1274	1157	970	781	492	377	257	178	152
1.70V/cell	1430	1263	1027	811	504	385	261	180	154
1.65V/cell	1535	1333	1068	834	515	392	265	183	156
1.60V/cell	1606	1381	1095	849	522	396	267	184	157

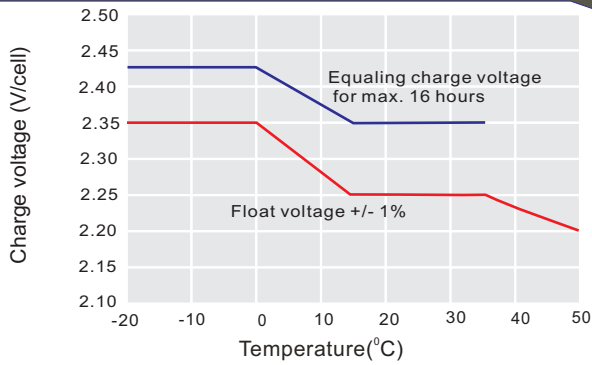
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	1629	1605	1492	1288	847	661	459	324	279
1.80V/cell	1968	1916	1722	1442	926	717	493	346	298
1.75V/cell	2288	2114	1817	1491	946	730	501	351	302
1.70V/cell	2522	2274	1903	1538	966	742	507	355	305
1.65V/cell	2660	2365	1960	1572	981	752	513	359	308
1.60V/cell	2730	2414	1989	1588	989	757	517	360	309

Tubular GEL Battery-OPzV Series

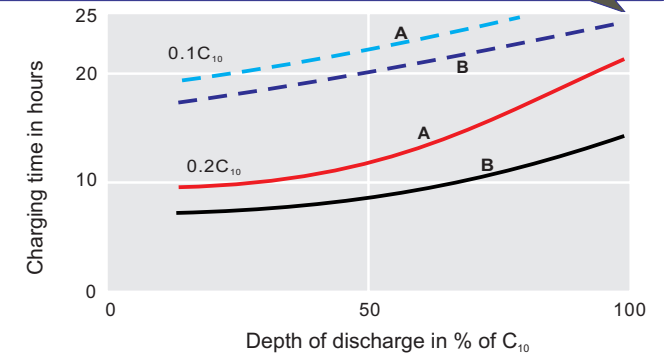
Characteristic Curve

Discharge Characteristics



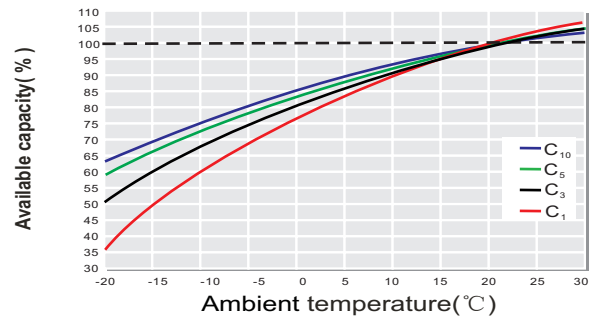
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for continuously different battery ambient temperature.

Charging Characteristics

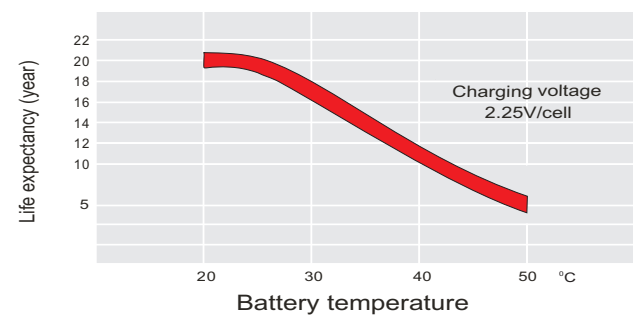


Charge voltage:
A—2.25 V/cell B—2.40 V/cell
— State of charge 100 % — State of charge 90 %

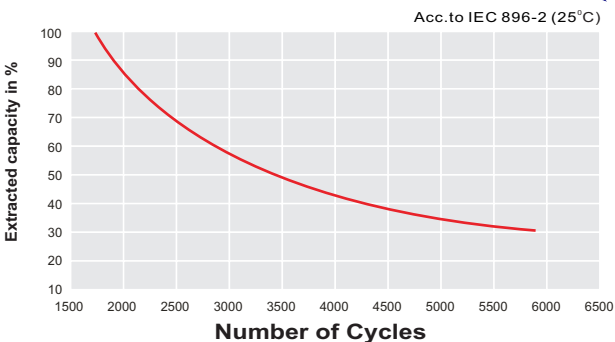
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time

