



OPzV Series Tubular GEL Battery

OPzV1500

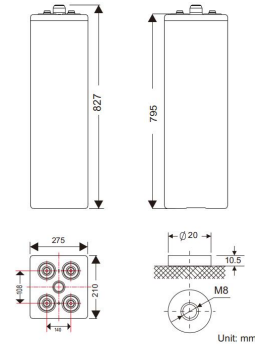
General Features

- ▶ 20 years design life
- ▶ adopt tubular plate with GEL technology
- ▶ Gas phase SiO₂ colloidal battery technology
- ▶ PVC-SiO₂ partition
- ▶ ABS material battery case
- ▶ Widely used in communication systems, military fields, power systems, broadcasting and television systems, etc



Specification	
Rated Voltage	2V
Nominal Capacity(C10, 1.80V/cell)	1500Ah
Terminal	M8
Approx. Weight	105.5±3% kg(232.6lbs)
Container Material	ABS
short-circuit current	5714A
Internal resistance(25°C:)	Approx 0.35 mΩ
Nominal Operating Temp. Range	25±5°C (77±5°F)
Self discharge	≤3%/month @ 25°C
Charge voltage(25°C)	
Max.Charging Current(25°C)	375.0A
Float charge:	2.23~2.25V/cell (-3mV/ °C)
Equalize charge:	2.30~2.40V/cell (-4mV/ °C)
Cycle charge:	2.35~2.45V/cell(-5mV/ °C)
Effect of temp to Capacity	
40°C (104°F)	105%
25°C (77°F)	100%
0°C (32°F)	85%

Dimension:275(L)×210(W) ×795(H)×827(TH)
Unit: mm



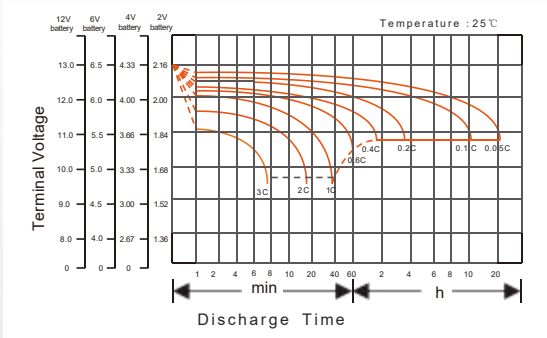
Rated Capacity(25°C)	
10Hour Rate (150.0A to 1.8V)	1500.0Ah
5Hour Rate (253.9A to 1.8V)	1269.5Ah
3Hour Rate (371A to 1.8V)	1113.0Ah
1Hour Rate (728A to 1.8V)	728.0Ah
Operating Temperature	
Discharge:	-15 ~50°C(5~ 122°F)
Charge :	-15 ~50°C(5~ 122°F)
Storage:	-20 ~40°C(-4~ 104°F)

Constant Current Discharge Characteristics Unit:A (25°C,77°F)																
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	1544	1208	891	557	401	319	271.0	238.3	192.3	157.4	132.9	81.4	70.5	38.61	27.84	21.53
1.65V	1455	1148	839	542	394	312	268.0	235.4	190.8	156.7	132.2	80.8	70.0	38.61	27.47	21.53
1.70V	1374	1103	824	527	386	310	264.3	231.7	188.6	155.9	131.4	80.2	69.5	37.87	26.73	20.79
1.75V	1286	1043	772	512	379	304	259.9	227.2	184.9	153.7	130.7	79.6	68.3	37.87	26.58	20.79
1.80V	1198	975	728	497	371	297	253.9	221.3	180.4	150.0	127.7	77.2	66.8	37.13	25.25	20.05
1.85V	1022	816	617	448	321	262	226.3	199.0	166.5	142.6	126.2	76.0	64.6	34.90	23.76	19.31
1.90V	845	676	529	382	287	242	210.5	183.8	151.0	128.2	113.6	68.3	59.4	32.67	21.90	17.82
1.95V	662	500	375	283	234	205	165.4	141.6	115.7	103.0	90.6	57.9	52.7	28.22	18.56	14.85

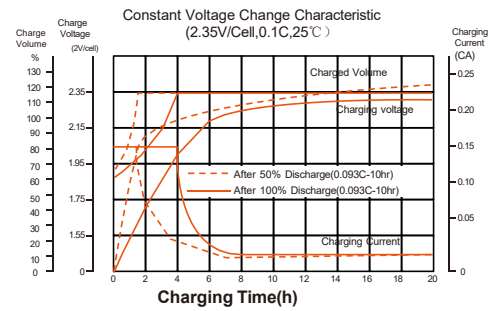
Constant Power Discharge Characteristics Unit: W/cell (25°C ,77°F)																
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	2661	2132	1626	1040	757	605	514.6	453.7	367.5	301.5	254.7	156.2	140.3	77.07	55.69	42.94
1.65V	2543	2021	1530	1017	746	593	510.1	449.2	365.3	300.7	253.9	155.6	139.6	76.99	54.80	42.83
1.70V	2403	1940	1507	995	735	592	504.9	443.3	362.3	300.0	253.2	155.0	138.8	75.66	53.39	41.58
1.75V	2271	1860	1440	973	724	583	498.2	436.6	356.4	297.0	252.5	154.4	136.6	75.74	53.16	41.54
1.80V	2146	1786	1366	950	713	571	488.6	426.2	348.2	289.9	247.3	150.3	134.4	74.66	50.79	40.32
1.85V	1845	1499	1176	860	622	509	440.2	387.6	324.6	278.8	246.5	149.1	131.4	70.98	48.34	39.27
1.90V	1536	1286	1014	742	562	474	412.9	360.6	296.4	252.1	223.5	135.4	123.3	67.79	45.44	36.98
1.95V	1235	956	720	551	459	402	324.6	278.4	227.9	203.1	178.9	115.1	109.6	58.66	38.61	30.89

Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

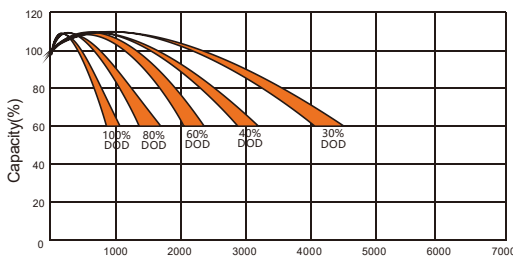
Discharge Characteristics Curve



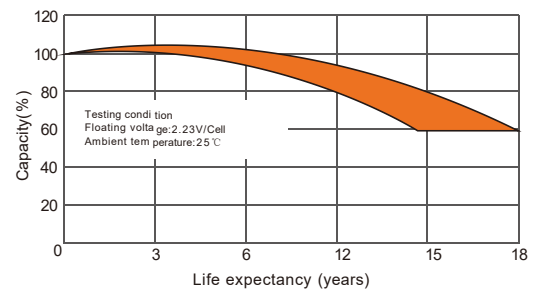
Charging Characteristics Curve



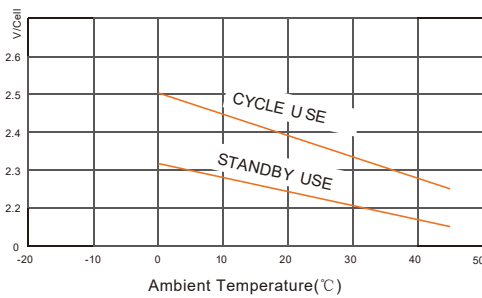
Cycle life of Different DOD



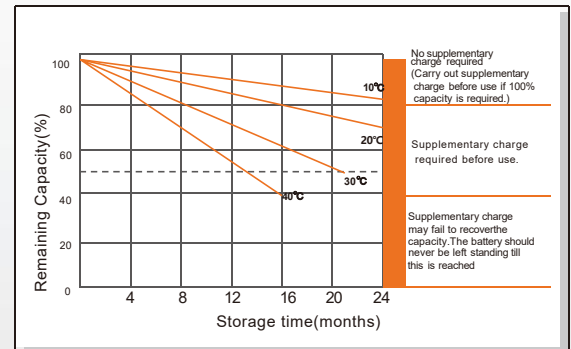
Float charging service life Curve



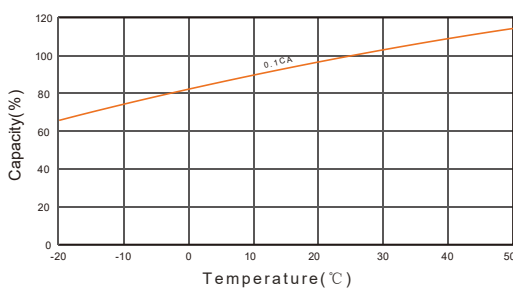
Charging voltage and temperature relationship



Self-discharge Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life

