



OPzV Series Tubular GEL Battery

OPzV600

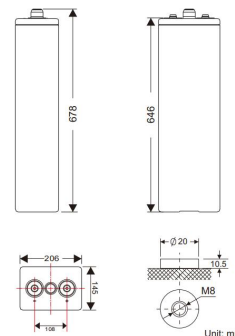
General Features

- ▶ 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)	600Ah
Terminal	M8
Approx. Weight	45.0±3% kg(99.2lbs)
Container Material	ABS
short-circuit current	4444A
Internal resistance(25°C:)	Approx 0.45 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)	150.0A
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:145(L)×206(W) ×646(H)×678(TH)
Unit: mm



Rated Capacity(25°C)	
10Hour Rate (60.0A to 1.8V)	600.0Ah
5Hour Rate (101.6A to 1.8V)	508.0Ah
3Hour Rate (149A to 1.8V)	447.0Ah
1Hour Rate (291A to 1.8V)	291.0Ah
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)

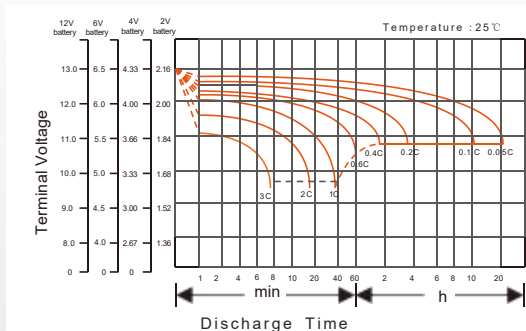
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	617	483	356	223	160	128	108.4	95.3	76.9	63.0	53.2	32.6	28.2	15.44	11.14	8.61
1.65V	582	459	336	217	157	125	107.2	94.1	76.3	62.7	52.9	32.3	28.0	15.44	10.99	8.61
1.70V	550	441	330	211	154	124	105.7	92.7	75.4	62.4	52.6	32.1	27.8	15.15	10.69	8.32
1.75V	515	417	309	205	151	122	104.0	90.9	74.0	61.5	52.3	31.8	27.3	15.15	10.63	8.32
1.80V	479	390	291	199	149	119	101.6	88.5	72.2	60.0	51.1	30.9	26.7	14.85	10.10	8.02
1.85V	409	326	247	179	128	105	90.5	79.6	66.6	57.0	50.5	30.4	25.8	13.96	9.50	7.72
1.90V	338	270	212	153	115	97	84.2	73.5	60.4	51.3	45.4	27.3	23.8	13.07	8.76	7.13
1.95V	265	200	150	113	94	82	66.2	56.7	46.3	41.2	36.2	23.2	21.1	11.29	7.43	5.94

Constant Power Discharge Characteristics Unit: W/cell (25°C ,77°F)

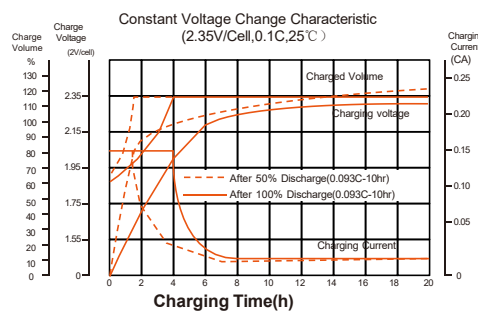
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	1064	853	650	416	303	242	205.8	181.5	147.0	120.6	101.9	62.5	56.1	30.83	22.28	17.17
1.65V	1017	809	612	407	298	237	204.0	179.7	146.1	120.3	101.6	62.3	55.8	30.80	21.92	17.13
1.70V	961	776	603	398	294	237	202.0	177.3	144.9	120.0	101.3	62.0	55.5	30.29	21.35	16.63
1.75V	908	744	576	389	290	233	199.3	174.6	142.6	118.8	101.0	61.8	54.6	30.26	21.27	16.62
1.80V	858	714	546	380	285	228	195.4	170.5	139.3	116.0	98.9	60.1	53.8	29.86	20.31	16.13
1.85V	738	600	470	344	249	204	176.1	155.0	129.8	111.5	98.6	59.6	52.6	28.39	19.33	15.71
1.90V	614	515	406	297	225	190	165.1	144.3	118.5	100.8	89.4	54.2	49.3	27.12	18.18	14.79
1.95V	494	382	288	220	183	161	129.8	111.4	91.2	81.2	71.6	46.0	43.8	23.46	15.44	12.36

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.

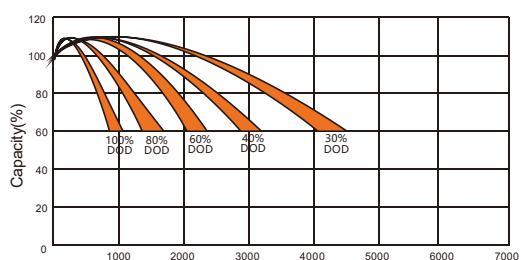
Discharge Characteristics Curve



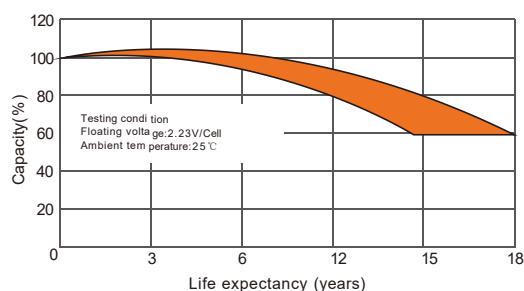
Charging Characteristics Curve



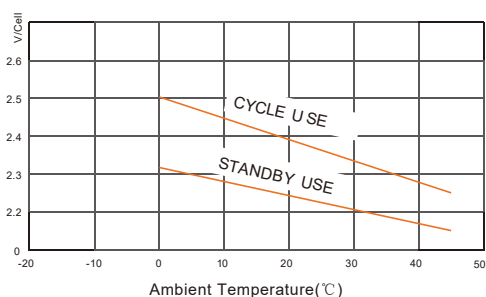
Cycle life of Different DOD



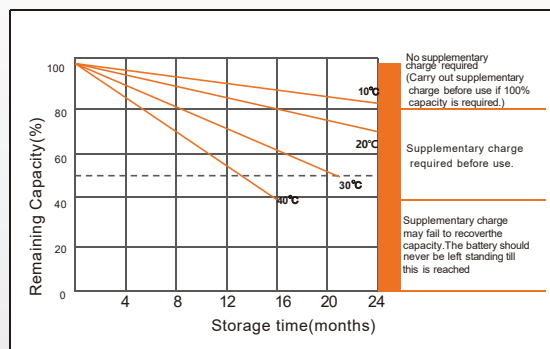
Float charging service life Curve



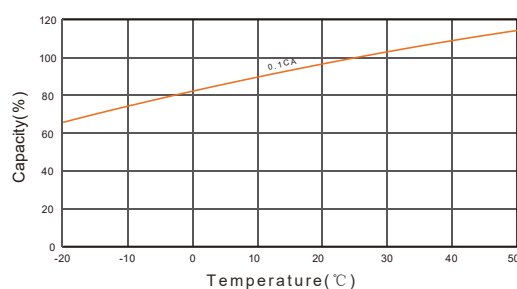
Charging voltage and temperature relationship



Self-discharge Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life

