



OPzV Series Tubular GEL Battery

OPzV800

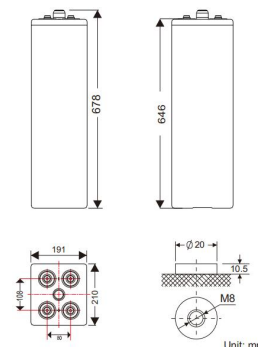
General Features

- ▶ 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)	800Ah
Terminal	M8
Approx. Weight	60.0±3% kg(132.3lbs)
Container Material	ABS
short-circuit current	4761A
Internal resistance(25°C:)	Approx 0.42 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)	200.0A
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:191(L)×210(W) ×646(H)×678(TH)
Unit: mm



Rated Capacity(25°C)	
10Hour Rate (80.0A to 1.8V)	800.0Ah
5Hour Rate (135.4A to 1.8V)	677.0Ah
3Hour Rate (198A to 1.8V)	594.0Ah
1Hour Rate (388A to 1.8V)	388.0Ah
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)

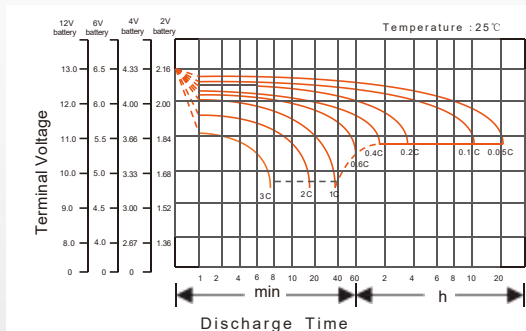
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	823	644	475	297	214	170	144.5	127.1	102.6	84.0	70.9	43.4	37.6	20.59	14.85	11.48
1.65V	776	612	447	289	210	166	143.0	125.5	101.8	83.6	70.5	43.1	37.3	20.59	14.65	11.48
1.70V	733	588	440	281	206	166	141.0	123.6	100.6	83.2	70.1	42.8	37.1	20.20	14.26	11.09
1.75V	686	556	412	273	202	162	138.6	121.2	98.6	82.0	69.7	42.5	36.4	20.20	14.18	11.09
1.80V	639	520	388	265	198	158	135.4	118.0	96.2	80.0	68.1	41.2	35.6	19.80	13.46	10.69
1.85V	545	435	329	239	171	140	120.7	106.1	88.8	76.1	67.3	40.6	34.5	18.61	12.67	10.30
1.90V	451	361	282	204	153	129	112.3	98.0	80.5	68.4	60.6	36.4	31.7	17.42	11.68	9.50
1.95V	353	267	200	151	125	109	88.2	75.5	61.7	54.9	48.3	30.9	28.1	15.05	9.90	7.92

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

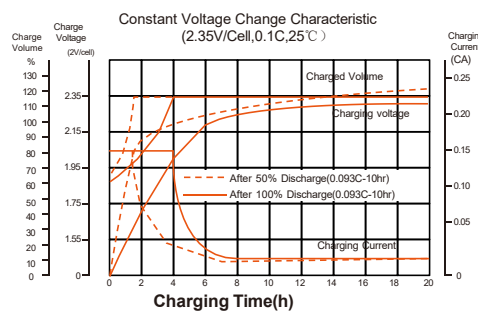
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	1419	1137	867	554	404	323	274.4	242.0	196.0	160.8	135.8	83.3	74.8	41.10	29.70	22.90
1.65V	1356	1078	816	543	398	316	272.1	239.6	194.8	160.4	135.4	83.0	74.4	41.06	29.22	22.84
1.70V	1282	1035	804	531	392	316	269.3	236.4	193.2	160.0	135.0	82.7	74.1	40.39	28.47	22.18
1.75V	1211	992	768	519	386	311	265.7	232.8	190.1	158.4	134.6	82.4	72.9	40.35	28.35	22.15
1.80V	1145	953	729	507	380	305	260.6	227.3	185.7	154.6	131.9	80.2	71.7	39.82	27.09	21.50
1.85V	984	800	627	459	332	272	234.8	206.7	173.1	148.7	131.5	79.5	70.1	37.86	25.78	20.94
1.90V	819	686	541	396	299	253	220.2	192.3	158.1	134.5	119.2	72.2	65.7	36.15	24.24	19.72
1.95V	659	510	384	294	245	214	173.1	148.5	121.6	108.3	95.4	61.4	58.4	31.28	20.59	16.47

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.

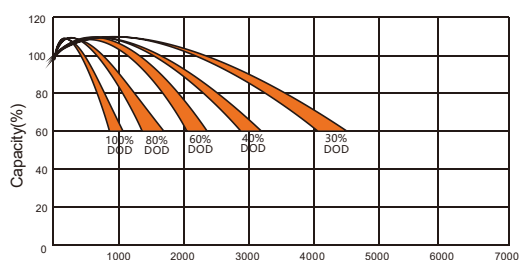
Discharge Characteristics Curve



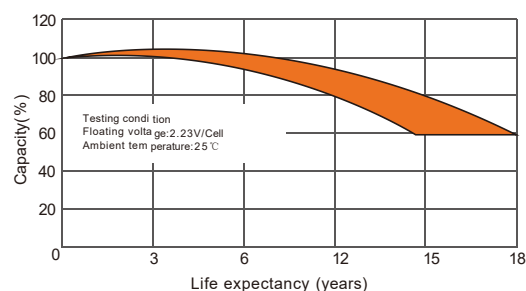
Charging Characteristics Curve



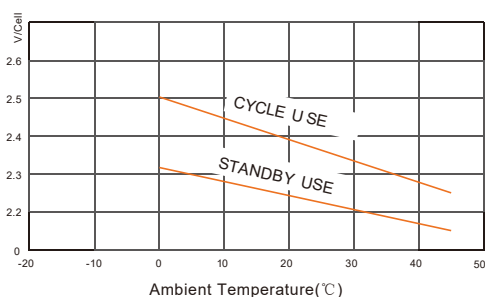
Cycle life of Different DOD



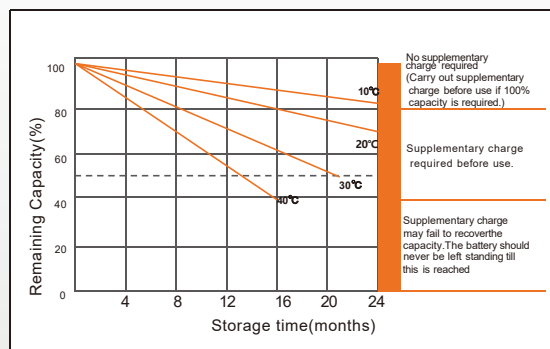
Float charging service life Curve



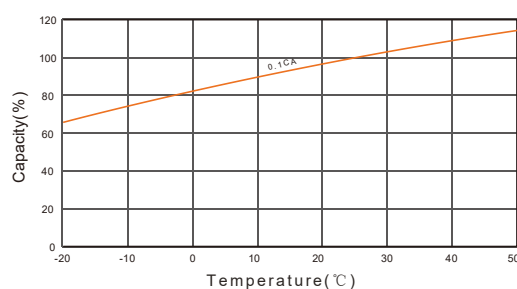
Charging voltage and temperature relationship



Self-discharge Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life

