



OPzV Series Tubular GEL Battery

OPzV3000

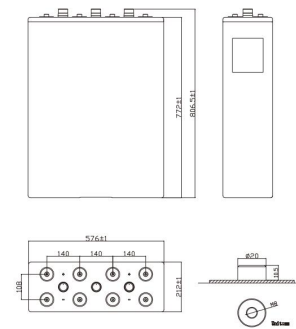
General Features

- ▶ 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)	3000Ah
Terminal	M8
Approx. Weight	212.0±3% kg(467.4lbs)
Container Material	ABS
short-circuit current	6666A
Internal resistance(25°C:)	Approx 0.30 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)	750.0A
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:576(L)×212(W) ×772(H)×807(TH)
Unit: mm



Rated Capacity(25°C)	
10Hour Rate (300.0A to 1.8V)	3000.0Ah
5Hour Rate (507.9A to 1.8V)	2539.5Ah
3Hour Rate (743A to 1.8V)	2229.0Ah
1Hour Rate (1426A to 1.8V)	1426.0Ah
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)

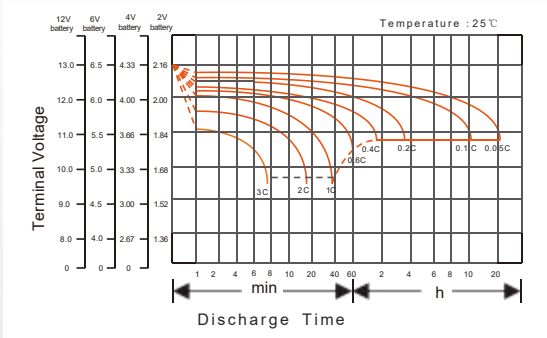
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	3056	2391	1746	1114	802	639	542.0	476.7	384.6	314.8	265.8	162.8	141.1	77.22	55.69	43.07
1.65V	2881	2272	1644	1084	787	624	536.1	470.7	381.6	313.3	264.3	161.6	140.0	77.22	54.95	43.07
1.70V	2721	2183	1615	1054	772	621	528.7	463.3	377.2	311.9	262.8	160.4	139.0	75.74	53.46	41.58
1.75V	2547	2064	1514	1025	757	609	519.8	454.4	369.8	307.4	261.4	159.2	136.6	75.74	53.16	41.58
1.80V	2372	1931	1426	995	743	594	507.9	442.5	360.9	300.0	255.4	154.4	133.7	74.25	50.49	40.10
1.85V	2043	1632	1235	897	642	525	452.5	398.0	333.0	285.2	252.5	152.1	129.2	69.80	47.52	38.61
1.90V	1691	1352	1058	764	575	484	421.1	367.5	302.0	256.4	227.2	136.6	118.8	65.34	43.81	35.64
1.95V	1323	1000	750	566	469	410	330.8	283.3	231.4	206.0	181.2	115.8	105.4	56.43	37.13	29.70

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

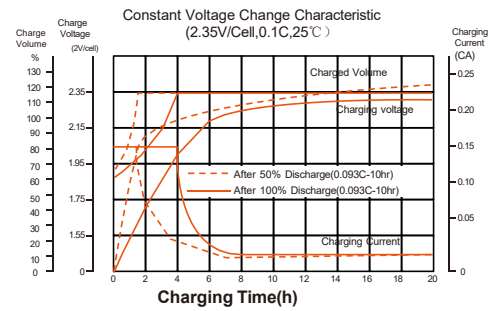
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	5268	4220	3187	2079	1515	1210	1029.1	907.3	735.1	602.9	509.4	312.4	280.7	154.14	111.38	85.87
1.65V	5035	4002	2998	2034	1492	1187	1020.2	898.4	730.6	601.4	507.9	311.3	279.2	153.98	109.59	85.66
1.70V	4759	3842	2954	1990	1470	1184	1009.8	886.5	724.7	599.9	506.4	310.1	277.7	151.47	106.77	83.16
1.75V	4497	3682	2823	1945	1448	1166	996.4	873.2	712.8	594.0	504.9	308.9	273.2	151.32	106.33	83.08
1.80V	4249	3536	2678	1901	1426	1142	977.1	852.4	696.5	579.8	494.5	300.6	268.8	149.32	101.57	80.63
1.85V	3690	2999	2352	1720	1244	1018	880.4	775.2	649.2	557.5	493.5	298.2	262.8	141.96	96.67	78.53
1.90V	3072	2573	2029	1485	1123	948	825.7	721.3	592.7	504.2	447.0	270.9	246.5	135.58	90.88	73.95
1.95V	2470	1911	1441	1101	917	804	649.2	556.9	455.8	406.2	357.9	230.2	219.2	117.32	77.22	61.78

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.

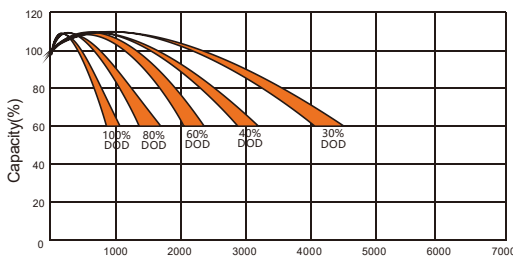
Discharge Characteristics Curve



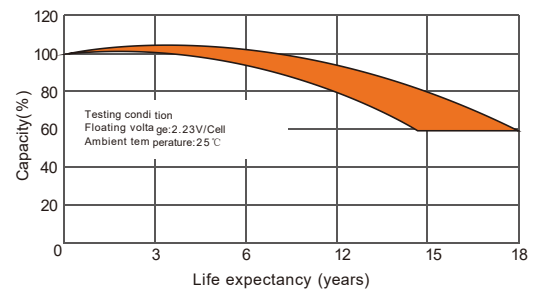
Charging Characteristics Curve



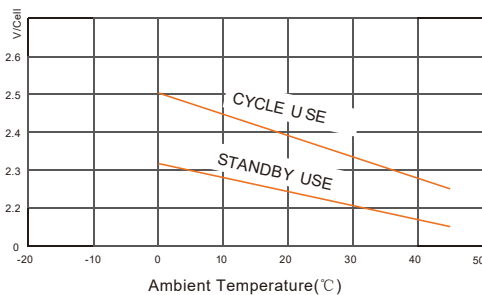
Cycle life of Different DOD



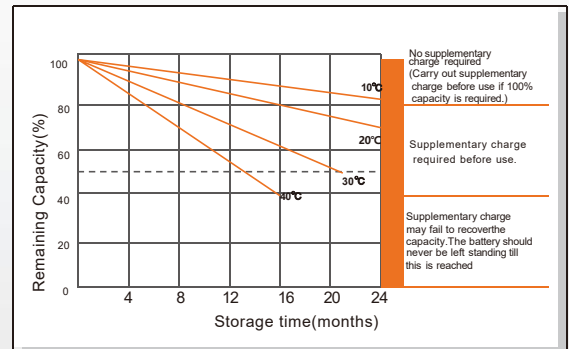
Float charging service life Curve



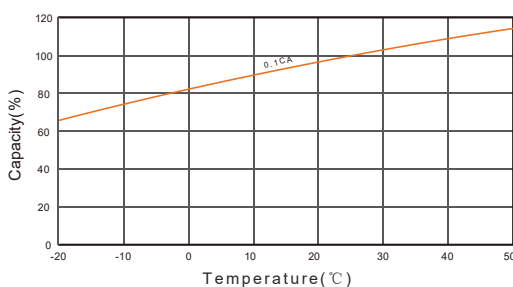
Charging voltage and temperature relationship



Self-discharge Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life

