



OPzV Series Tubular GEL Battery

OPzV2000

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

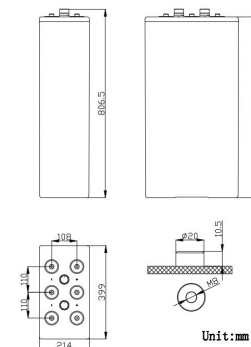


Specification	
Rated Voltage	2V
Nominal Capacity(C10,1.80V/cell)	2000Ah
Terminal	M8
Approx. Weight	142.5±3% kg(314.2lbs)
Container Material	ABS
short-circuit current	5882A
Internal resistance(25°C:)	Approx 0.34 mΩ
Nominal Operating Temp. Range	25±5°C (77±5°F)
Self discharge	≤3%/month @ 25°C

Charge voltage(25°C)	
Max.Charging Current(25°C)	500.0A
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:399(L)×214(W) ×772(H)×807(TH)
Unit: mm



Rated Capacity(25°C)	
10Hour Rate (200.0A to 1.8V)	2000.0Ah
5Hour Rate (338.5A to 1.8V)	1692.5Ah
3Hour Rate (495A to 1.8V)	1485.0Ah
1Hour Rate (951A to 1.8V)	951.0Ah

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)

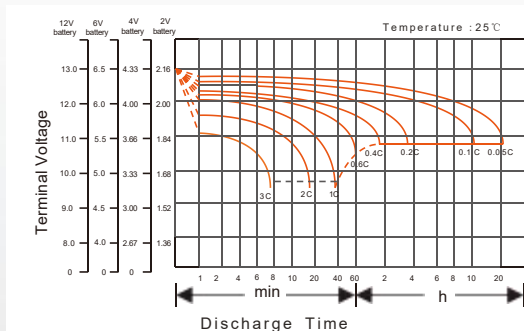
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	2037	1594	1164	743	535	426	361.4	317.8	256.4	209.9	177.2	108.5	94.1	51.48	37.13	28.71
1.65V	1921	1515	1098	723	525	416	357.4	313.8	254.4	208.9	176.2	107.7	93.4	51.48	36.63	28.71
1.70V	1814	1455	1077	703	515	414	352.4	308.9	251.5	207.9	175.2	106.9	92.7	50.49	35.64	27.72
1.75V	1698	1376	1009	683	505	406	346.5	302.9	246.5	204.9	174.2	106.1	91.1	50.49	35.44	27.72
1.80V	1581	1287	951	663	495	396	338.5	295.0	240.6	200.0	170.3	103.0	89.1	49.50	33.66	26.73
1.85V	1362	1088	823	598	428	350	301.7	265.3	222.0	190.2	168.3	101.4	86.1	46.53	31.68	25.74
1.90V	1127	902	706	510	383	323	280.7	245.0	201.3	171.0	151.5	91.1	79.2	43.56	29.21	23.76
1.95V	882	666	500	377	313	273	220.6	188.8	154.3	137.3	120.8	77.2	70.3	37.62	24.75	19.80

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

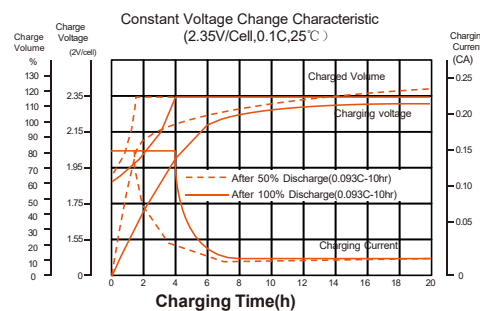
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	3512	2814	2125	1386	1010	807	686.1	604.9	490.1	401.9	339.6	208.3	187.1	102.76	74.25	57.25
1.65V	3357	2668	1999	1356	995	791	680.1	599.0	487.1	401.0	338.6	207.5	186.1	102.65	73.06	57.10
1.70V	3173	2561	1970	1327	980	789	673.2	591.0	483.1	400.0	337.6	206.7	185.1	100.98	71.18	55.44
1.75V	2998	2455	1882	1297	965	777	664.3	582.1	475.2	396.0	336.6	205.9	182.2	100.88	70.88	55.38
1.80V	2833	2358	1785	1267	950	761	651.4	568.3	464.3	386.5	329.7	200.4	179.2	99.54	67.72	53.75
1.85V	2460	1999	1568	1147	829	679	586.9	516.8	432.8	371.7	328.7	198.8	175.2	94.64	64.45	52.36
1.90V	2048	1715	1352	990	749	632	550.5	480.9	395.1	336.1	298.0	180.6	164.3	90.39	60.59	49.30
1.95V	1646	1274	960	734	612	536	432.8	371.2	303.9	270.8	238.6	153.5	146.1	78.21	51.48	41.18

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.

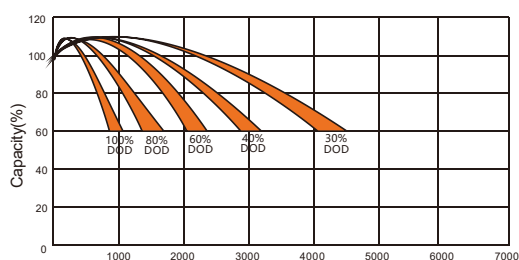
Discharge Characteristics Curve



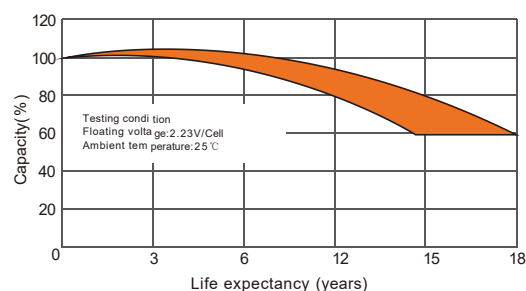
Charging Characteristics Curve



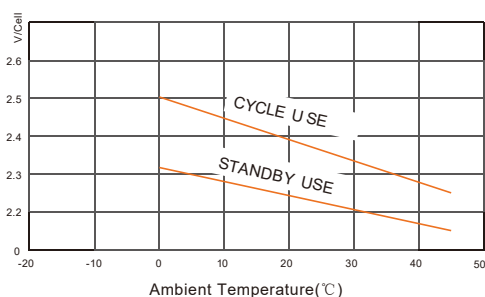
Cycle life of Different DOD



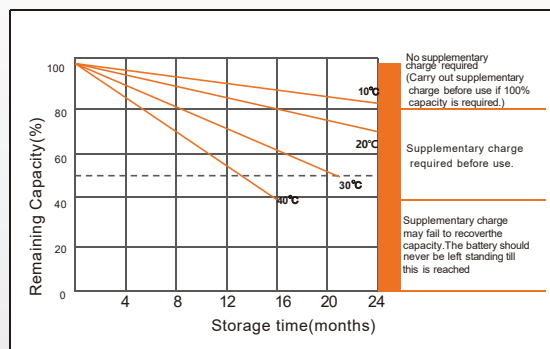
Float charging service life Curve



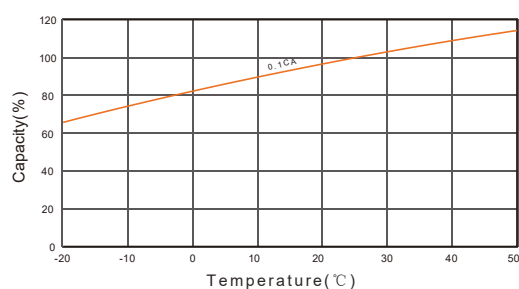
Charging voltage and temperature relationship



Self-discharge Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life

