



OPzV Series Tubular GEL Battery

OPzV1200

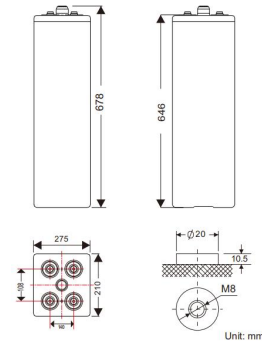
General Features

- ▶ 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)	1200Ah
Terminal	M8
Approx. Weight	87.0±3% kg(191.8lbs)
Container Material	ABS
short-circuit current	5263A
Internal resistance(25°C:)	Approx 0.38 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)	300.0A
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) ×646(H)×678(TH)
Unit: mm



Rated Capacity(25°C)	
10Hour Rate (120.0A to 1.8V)	1200.0Ah
5Hour Rate (203.1A to 1.8V)	1015.5Ah
3Hour Rate (297A to 1.8V)	891.0Ah
1Hour Rate (582A to 1.8V)	582.0Ah
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)

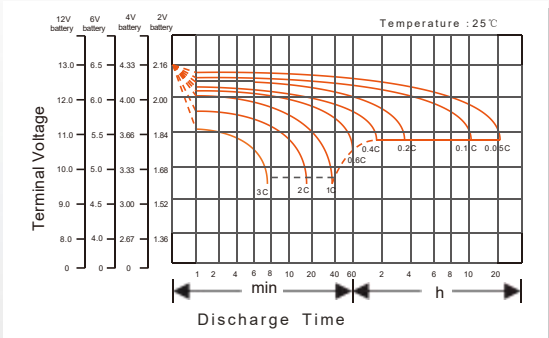
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	1235	966	713	446	321	255	216.8	190.7	153.8	125.9	106.3	65.1	56.4	30.89	22.28	17.23
1.65V	1164	918	671	434	315	249	214.4	188.3	152.7	125.3	105.7	64.6	56.0	30.89	21.98	17.23
1.70V	1100	882	659	422	309	248	211.5	185.3	150.9	124.7	105.1	64.2	55.6	30.29	21.38	16.63
1.75V	1029	834	618	410	303	244	207.9	181.8	147.9	123.0	104.5	63.7	54.6	30.29	21.27	16.63
1.80V	958	780	582	398	297	238	203.1	177.0	144.3	120.0	102.2	61.8	53.5	29.70	20.20	16.04
1.85V	817	653	494	359	257	210	181.0	159.2	133.2	114.1	101.0	60.8	51.7	27.92	19.01	15.44
1.90V	676	541	423	306	230	194	168.4	147.0	120.8	102.6	90.9	54.6	47.5	26.14	17.52	14.26
1.95V	529	400	300	226	188	164	132.3	113.3	92.6	82.4	72.5	46.3	42.2	22.57	14.85	11.88

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

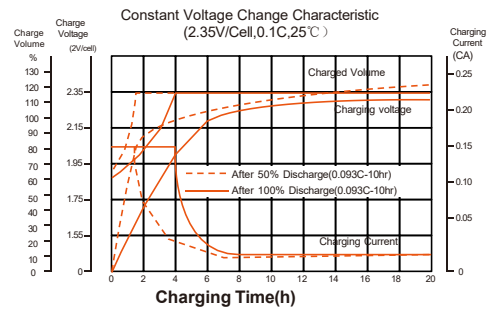
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	2129	1705	1301	832	606	484	411.6	362.9	294.0	241.2	203.7	125.0	112.3	61.66	44.55	34.26
1.65V	2034	1617	1224	814	597	475	408.1	359.4	292.2	240.6	203.1	124.5	111.7	61.59	43.84	34.35
1.70V	1923	1552	1206	796	588	473	403.9	354.6	289.9	240.0	202.6	124.0	111.1	60.53	42.71	33.26
1.75V	1817	1488	1152	778	579	466	398.6	349.3	285.1	237.6	202.0	123.6	109.3	60.59	42.53	33.23
1.80V	1717	1429	1093	760	570	457	390.9	341.0	278.6	231.9	197.8	120.2	107.5	59.73	40.63	32.25
1.85V	1476	1200	941	688	497	407	352.2	310.1	259.7	223.0	197.2	119.3	105.1	56.79	38.67	31.41
1.90V	1229	1029	811	594	449	379	330.3	288.5	237.1	201.7	178.8	108.3	98.6	54.23	36.35	29.58
1.95V	988	764	576	440	367	321	259.7	222.7	182.3	162.5	143.2	92.1	87.7	46.93	30.89	24.71

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.

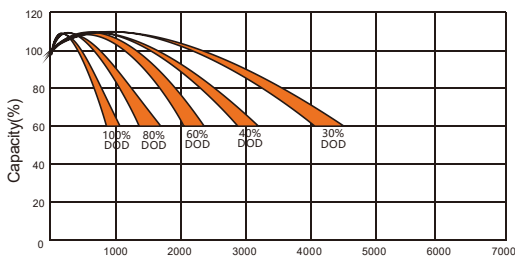
Discharge Characteristics Curve



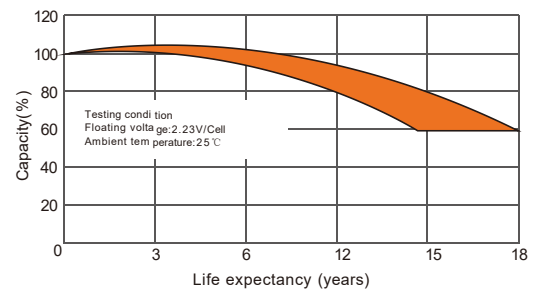
Charging Characteristics Curve



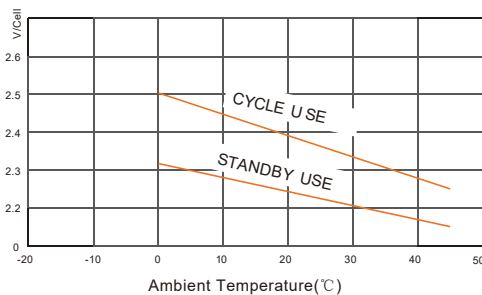
Cycle life of Different DOD



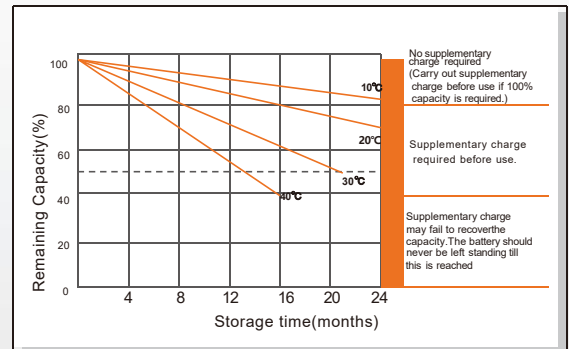
Float charging service life Curve



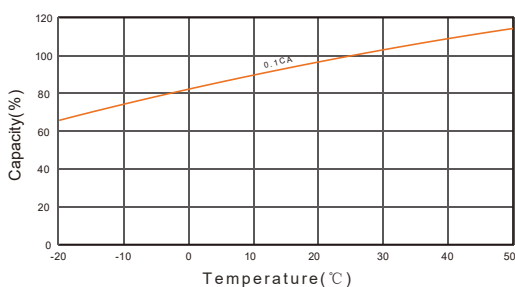
Charging voltage and temperature relationship



Self-discharge Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life

