



OPzV Series Tubular GEL Battery

OPzV200

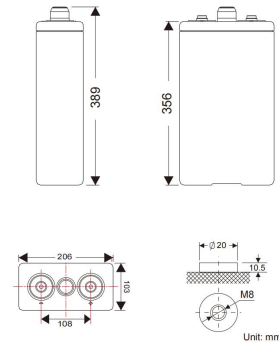
General Features

- ▶ 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)	200Ah
Terminal	M8
Approx. Weight	18.0±3% kg(39.7lbs)
Container Material	ABS
short-circuit current	2352A
Internal resistance(25°C:)	Approx 0.85 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)	50.0A
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:103(L)×206(W) ×356(H)×389(TH)
Unit: mm



Rated Capacity(25°C)	
10Hour Rate (20.0A to 1.8V)	200.0Ah
5Hour Rate (33.9A to 1.8V)	169.5Ah
3Hour Rate (50.0A to 1.8V)	150.0Ah
1Hour Rate (97.0A to 1.8V)	97.0Ah
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)

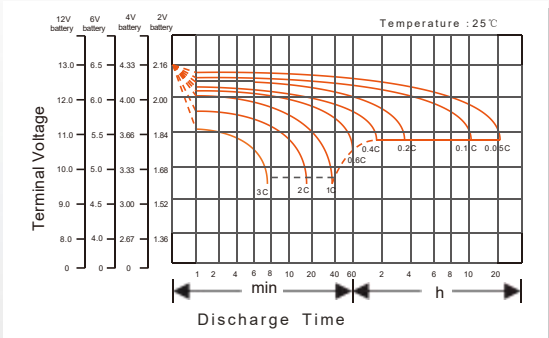
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	206	161	119	74	53	43	36.1	31.8	25.6	21.0	17.7	10.9	9.40	5.15	3.71	2.87
1.65V	194	153	112	72	52	42	35.7	31.4	25.4	20.9	17.6	10.8	9.30	5.15	3.66	2.87
1.70V	183	147	110	70	51	41	35.2	30.9	25.1	20.8	17.5	10.7	9.30	5.05	3.56	2.77
1.75V	172	139	103	68	50	41	34.7	30.3	24.7	20.5	17.4	10.6	9.10	5.05	3.54	2.77
1.80V	160	130	97	66	50	40	33.9	29.5	24.1	20.0	17.0	10.0	8.90	4.95	3.37	2.67
1.85V	136	109	82	60	43	35	30.2	26.5	22.2	19.0	16.8	9.98	8.60	4.65	3.17	2.57
1.90V	113	90	71	51	38	32	28.1	24.5	20.1	17.1	15.1	9.1	7.90	4.36	2.92	2.38
1.95V	88	67	50	38	31	27	22.1	18.9	15.4	13.7	12.1	7.7	7.0	3.76	2.48	1.98

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

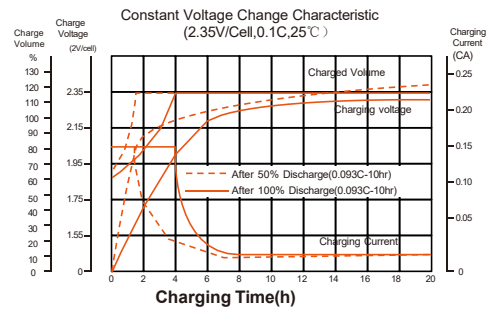
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	355	284	217	139	101	81	68.6	60.5	49.0	40.2	34.0	20.8	18.7	10.28	7.43	5.72
1.65V	339	270	204	136	99	79	68.0	59.9	48.7	40.1	33.9	20.8	18.6	10.27	7.31	5.71
1.70V	320	259	201	133	98	79	67.3	59.1	48.3	40.0	33.8	20.7	18.5	10.09	7.12	5.54
1.75V	303	248	192	130	97	78	66.4	58.2	47.5	39.6	33.7	20.6	18.2	10.10	7.09	5.54
1.80V	286	238	182	127	95	76	65.1	56.8	46.4	38.7	33.0	20.0	17.9	9.95	6.77	5.38
1.85V	246	200	157	115	83	68	58.7	51.7	43.3	37.2	32.9	19.9	17.5	9.46	6.44	5.24
1.90V	205	172	135	99	75	63	55.0	48.1	39.5	33.6	29.8	18.1	16.4	9.04	6.06	4.93
1.95V	165	127	96	73	61	54	43.3	37.1	30.4	27.1	23.9	15.3	14.6	7.82	5.15	4.12

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.

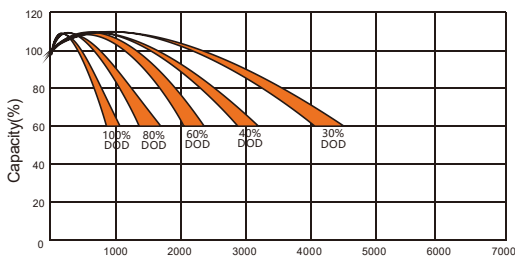
Discharge Characteristics Curve



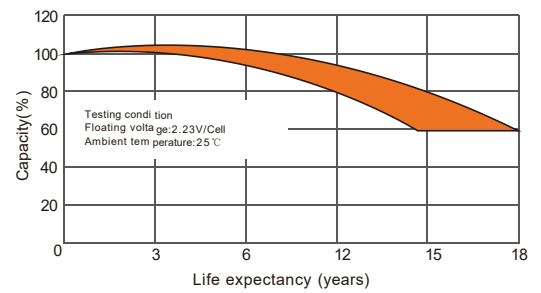
Charging Characteristics Curve



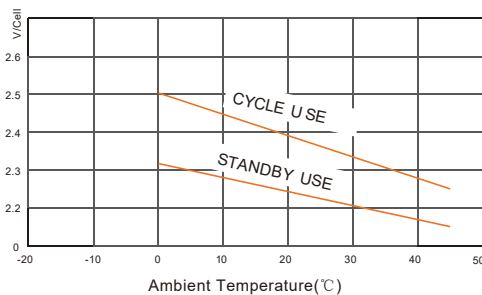
Cycle life of Different DOD



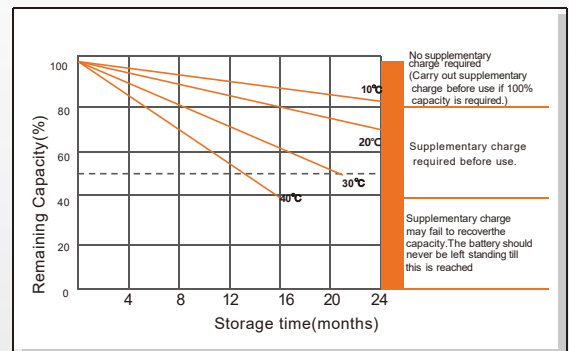
Float charging service life Curve



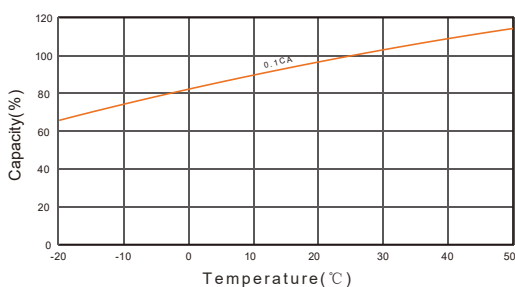
Charging voltage and temperature relationship



Self-discharge Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life

