



OPzV Series Tubular GEL Battery

OPzV250

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)	250Ah
Terminal	M8
Approx. Weight	21.5±3% kg(47.4lbs)
Container Material	ABS
short-circuit current	2777A
Internal resistance(25°C:)	Approx 0.72 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)	62.5A
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%

Constant Current Discharge Characteristics Unit:A (25°C,77°F)

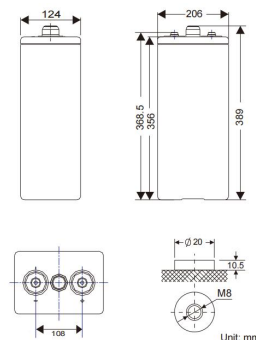
FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	257	201	149	93	67	53	45.2	39.7	32.1	26.2	22.2	13.6	11.8	6.44	1.64	3.59
1.65V	243	191	140	90	66	52	44.7	39.2	31.8	26.1	22.0	13.5	11.7	6.44	4.58	3.59
1.70V	229	184	137	88	64	52	44.1	38.6	31.4	26.0	21.9	13.4	11.6	6.31	4.46	3.47
1.75V	214	174	129	85	63	51	43.3	37.9	30.8	25.6	21.8	13.3	11.4	6.31	4.43	3.47
1.80V	200	163	121	83	62	50	42.3	36.9	30.1	25.0	21.3	12.9	11.1	6.19	4.21	3.34
1.85V	170	136	103	75	54	44	37.7	33.2	27.8	23.8	21.0	12.7	10.8	5.82	3.96	3.22
1.90V	141	113	88	64	48	40	35.1	30.6	25.2	21.4	18.9	11.4	9.90	5.45	3.65	2.97
1.95V	110	83	62	47	39	34	27.6	23.6	19.3	17.2	15.1	9.7	8.80	4.70	3.09	2.48

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	443	355	271	173	126	101	85.8	75.6	61.3	50.2	42.4	26.0	23.4	12.85	9.28	7.16
1.65V	424	337	255	170	124	99	85.0	74.9	60.9	50.1	42.3	25.9	23.3	12.83	9.13	7.14
1.70V	401	323	251	166	123	99	84.2	73.9	60.4	50.0	42.2	25.8	23.1	12.61	8.90	6.93
1.75V	379	310	240	162	121	97	83.0	72.8	59.4	49.5	42.1	25.7	22.8	12.60	8.86	6.92
1.80V	358	298	228	158	119	95	81.4	71.0	58.0	48.3	41.2	25.0	22.4	12.44	8.46	6.72
1.85V	307	250	196	143	104	85	73.4	64.6	54.1	46.5	41.1	24.8	21.9	11.83	8.06	6.54
1.90V	256	214	169	124	94	79	68.8	60.1	49.4	42.0	37.2	22.6	20.5	11.30	7.57	6.16
1.95V	206	159	120	92	76	67	54.1	46.4	38.0	33.9	29.8	19.2	18.3	9.78	6.44	5.15



Dimension:124(L)×206(W) ×356(H)×389(TH)
Unit: mm



Rated Capacity(25°C)

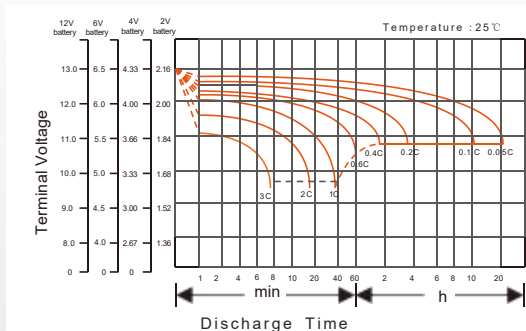
10Hour Rate (25.0A to 1.8V)	250.0Ah
5Hour Rate (42.3A to 1.8V)	211.5Ah
3Hour Rate (62.0A to 1.8V)	186.0Ah
1Hour Rate (121A to 1.8V)	121.0Ah

Operating Temperature

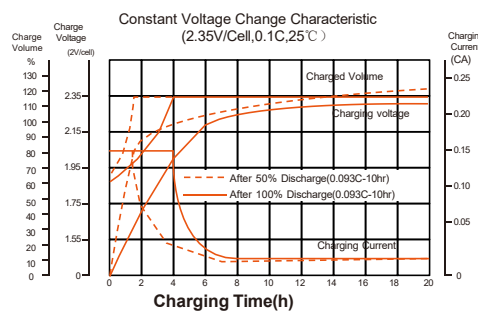
Discharge:	-15 ~50°C(5~ 122°F)
Charge :	-15 ~50°C(5~ 122°F)
Storage:	-20 ~40°C(-4~ 104°F)

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.

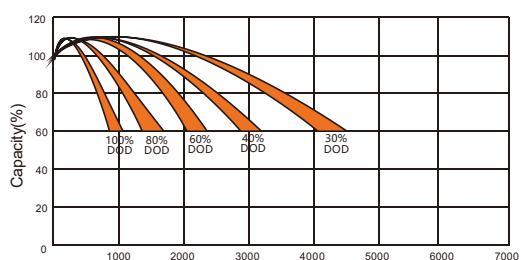
Discharge Characteristics Curve



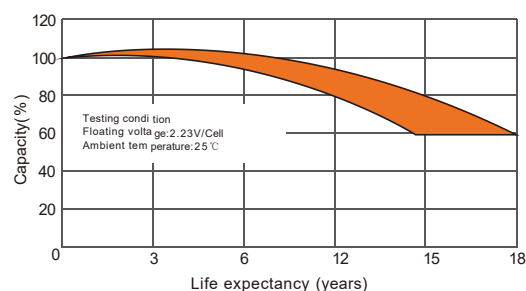
Charging Characteristics Curve



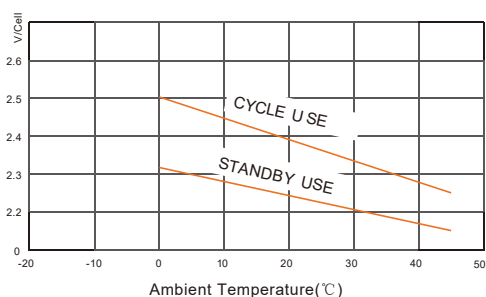
Cycle life of Different DOD



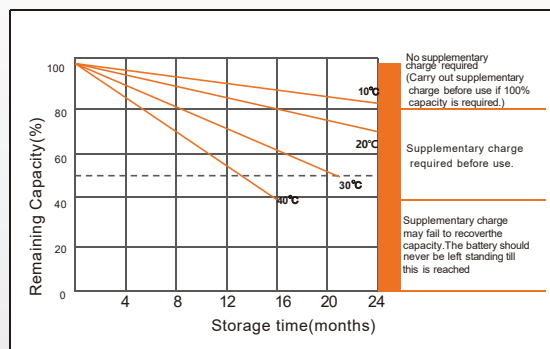
Float charging service life Curve



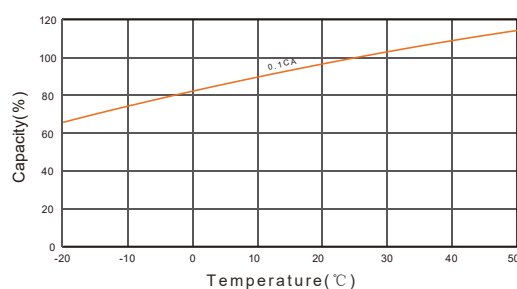
Charging voltage and temperature relationship



Self-discharge Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life

