OPzV Series Tubular GEL Battery

OPzV420

General Features

▶20 years design life

▶adopt tubular plate with GEL technology

▶Gas phase SiO2 colloidal battery technology

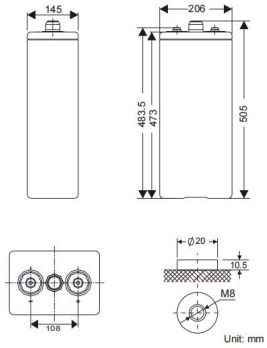
▶PVC-SiO2 partition

▶ABS material battery case

▶Widely used in communication systems, military fields, power systems, broadcasting and television systems, etc

Specification	
Rated Voltage	2V
Nominal Capacity(C10,1.60V/cell)	420Ah
Terminal	M8
Approx. Weight	31.5±3% kg(69.4lbs)
Container Material	ABS
short-circuit current	3636A
Internal resistance(25℃:)	Approx 0.55 mΩ
Nominal Operating Temp. Range	25±5℃ (77±5℉)
Self discharge	≤3%/month @ 25℃
Charge voltage(25℃)	
Max.Charging Current(25℃)	105.0A
Float charge:	2.23-2.25V/cell (-3mV/ ℃)
Equalize charge:	2.30~2.40V/cell (-4mV/ ℃)
Cycle charge:	2.35~2.45V/cell(-5mV/ ℃)
Effect of temp to Capacity	
40℃ (104℉)	105%
25℃ (77℉)	100%
0℃ (32℉)	85%

Dimension:145(L)×206(W) ×473(H)×505(TH)
Unit: mm



Rated Capacity(25℃)	
10Hour Rate (42.0A to 1.6V)	420.0Ah
5Hour Rate (67.7A to 1.8V)	338.5Ah
3Hour Rate (99.0A to 1.8V)	297Ah
1Hour Rate (194.0A to 1.8V)	194.0Ah

Operating Temperature	
Discharge:	-15 ~50℃(5~ 122℉)
Charge :	-15 ~50℃(5~ 122℉)
Storage:	-20 ~40℃(-4~ 104℉)

Constant Current Discharge Characteristics Unit:A (25℃,77℉)

FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	412	322	238	149	107	85	72.3	63.6	51.3	42.0	35.4	21.7	18.8	10.30	7.43	5.74
1.65V	388	306	224	145	105	83	71.5	62.8	50.9	41.8	35.2	21.5	18.7	10.30	7.33	5.74
1.70V	367	294	220	141	103	83	70.5	61.8	50.3	41.6	35.0	21.4	18.5	10.10	7.13	5.54
1.75V	343	278	206	137	101	81	69.3	60.6	49.3	41.0	34.8	21.2	18.2	10.10	7.09	5.54
1.80V	319	260	194	133	99	79	67.7	59.0	48.1	41.0	34.1	20.6	17.8	9.90	6.73	5.35
1.85V	272	218	165	120	86	70	60.3	53.1	44.4	38.0	33.7	20.3	17.2	9.31	6.34	5.15
1.90V	225	180	141	102	77	65	56.1	49.0	40.3	34.2	30.3	18.2	15.8	8.71	5.84	4.75
1.95V	176	133	100	75	63	55	44.1	37.8	30.9	27.5	24.2	15.4	14.1	7.52	4.95	3.96

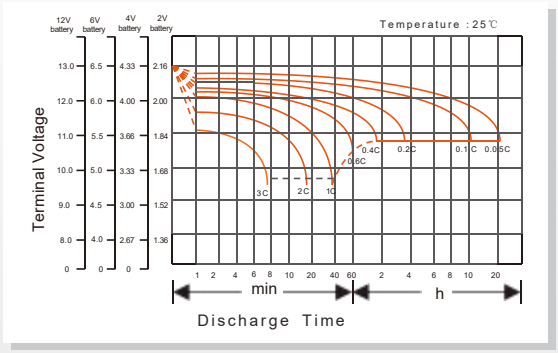
Constant Power Discharge Characteristics Unit: W/cell (25℃ ,77℉)

FV/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	72h	100h
1.60V	710	568	434	277	202	161	137.2	121.0	98.0	80.4	67.9	41.7	37.4	20.55	14.85	11.45
1.65V	678	539	408	271	199	158	136.0	119.8	97.4	80.2	67.7	41.5	37.2	20.53	14.61	11.42
1.70V	641	517	402	265	196	158	134.6	118.2	96.6	80.0	67.5	41.3	37.0	20.20	14.24	11.09
1.75V	606	496	384	259	193	155	132.9	116.4	95.0	79.2	67.3	41.2	36.4	20.18	14.18	11.08
1.80V	572	476	364	253	190	152	130.3	113.7	92.9	77.3	65.9	40.1	35.8	19.91	13.54	10.75
1.85V	492	400	314	229	166	136	117.4	103.4	86.6	74.3	65.7	39.8	35.0	18.93	12.89	10.47
1.90V	410	343	270	198	150	126	110.1	96.2	79.0	67.2	59.6	36.1	32.9	18.08	12.12	9.86
1.95V	329	255	192	147	122	107	86.6	74.2	60.8	54.2	47.7	30.7	29.2	15.64	10.30	8.24

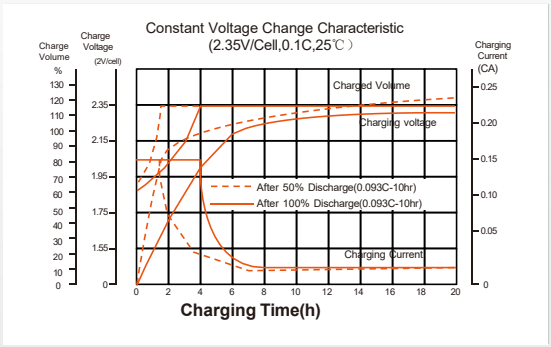
OPzV Series Tubular GEL Battery

OPzV420

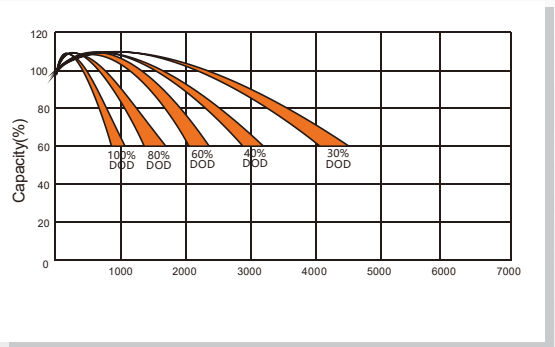
Discharge Characteristics Curve



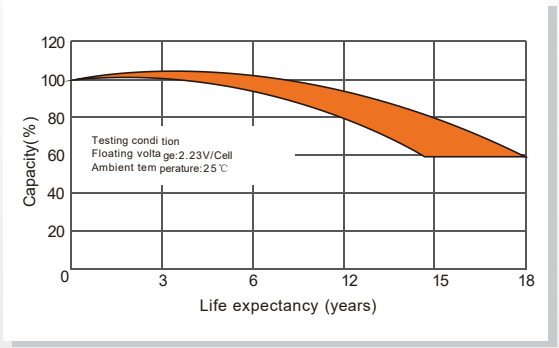
Charging Characteristics Curve



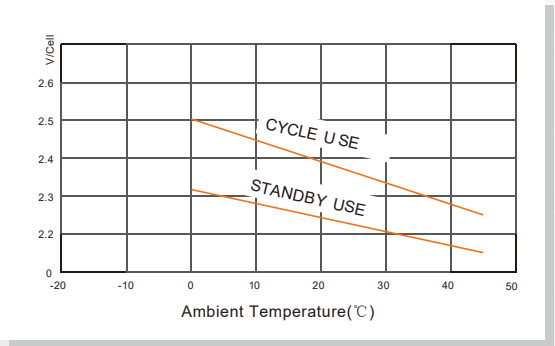
Cycle life of Different DOD



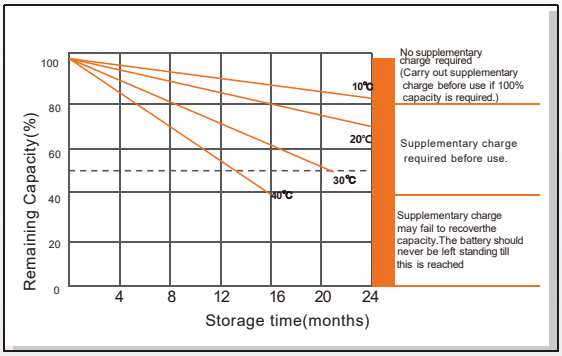
Float charging service life Curve



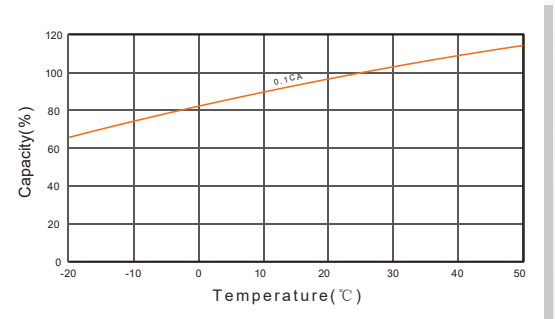
Charging voltage and temperature relationship



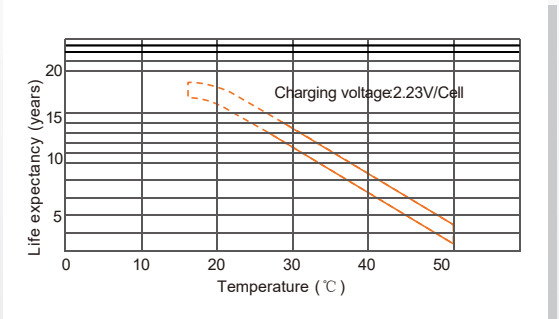
Self-discharge Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



Jiangxi JingJiu Power Science & Technology Co., LTD.

Add: 1388 Fushan No.1 Street, Xiaolan Economic Development Zone, Nanchang, Jiangxi, China.