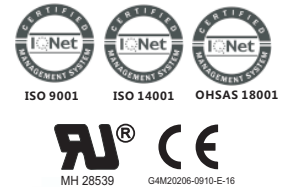


OPzV2-2000(2V2000Ah)



OPzV series is Valve Regulated Lead Acid battery that adopts immobilized GEL and Tubular Plate technology to offer high reliability and performance. The Battery is designed and manufactured according to DIN standards and with die-casting positive grid and patented formula of active material OPzV series exceeds DIN standard values with more than 25 years floating design life at 25 °C and It is the best solution for cyclic use under extreme operating conditions.

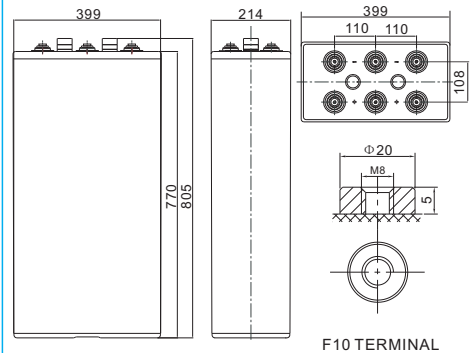


Specification

Cells Per Unit	1
Voltage Per Unit	2
Nominal Capacity	2000Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 142.5 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 0.44 mΩ
Terminal	F10(M8)
Max. Discharge Current	7000A (5 sec)
Design Life	25 years
Max. Charging Current	400.0 A
Reference Capacity	C3 1536.0AH C5 1735.5AH C10 2000.0AH C20 2136.0AH
Float Charging Voltage	2.25 V~2.30 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	2.37 V~2.40 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -40°C~60°C Charge: -20°C~50°C Storage: -40°C~60°C
Normal Operating Temperature Range	25°C ±5°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 2% at 20°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Dimensions

Unit: mm



Length	399±2mm (15.7 inches)
Width	214±2mm (8.43 inches)
Height	770±2mm (30.3 inches)
Total Height	805±2mm (31.7 inches)
Torque Value	10~12 N*m

Constant Current Discharge Characteristics : A(25°C)

F.V/ Time	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	2261	2003	1574	1132	722.4	538.2	361.4	249.5	209.2	109.8
1.65V	2053	1803	1426	1115	711.0	531.9	357.9	247.8	207.5	108.9
1.70V	1911	1708	1371	1086	699.5	522.3	352.2	245.0	205.7	108.0
1.75V	1703	1565	1296	1041	682.3	512.0	347.1	241.5	203.5	106.8
1.80V	1439	1399	1215	1001	659.4	500.6	340.3	237.5	200.0	105.0
1.85V	1170	1155	1044	892.9	602.1	460.3	315.7	222.1	187.5	98.44

Constant Power Discharge Characteristics : WPC(25°C)

F.V/ Time	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	3650	3227	2657	2121	1370	1029	700.0	489.4	412.5	216.6
1.65V	3557	3278	2618	2099	1359	1023	694.2	487.0	410.3	215.4
1.70V	3372	3151	2543	2059	1336	1006	688.5	482.5	406.8	213.6
1.75V	3059	2929	2426	1991	1307	988.7	677.1	477.4	402.8	211.5
1.80V	2631	2655	2300	1928	1279	971.7	665.8	470.4	397.2	208.5
1.85V	2178	2224	1993	1723	1170	897.8	620.2	440.1	372.5	195.6

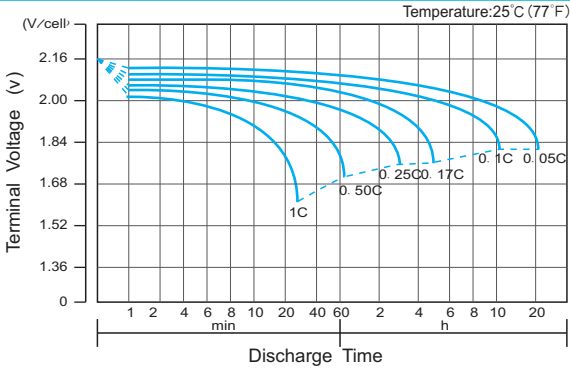
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

The battery must be fully charged before the capacity test. The C₁₀ should reach 95% after the first cycle and 100% after the third cycle.

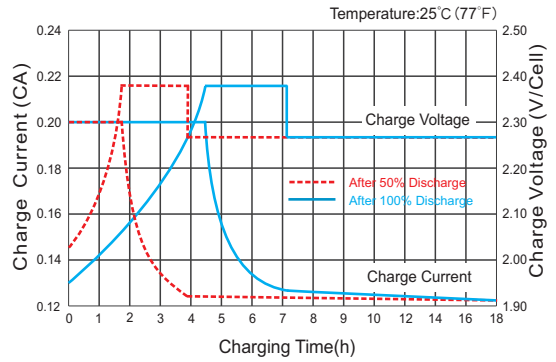
OPzV2-2000(2V2000Ah)



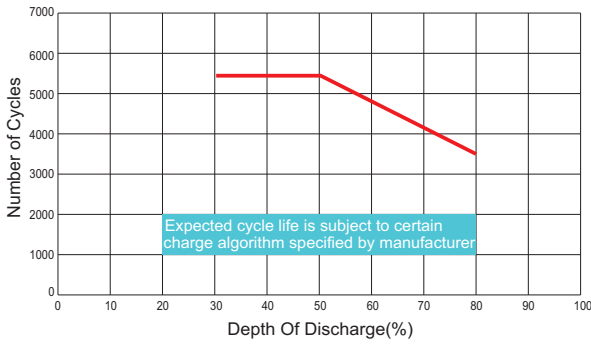
Discharge Characteristics Curve



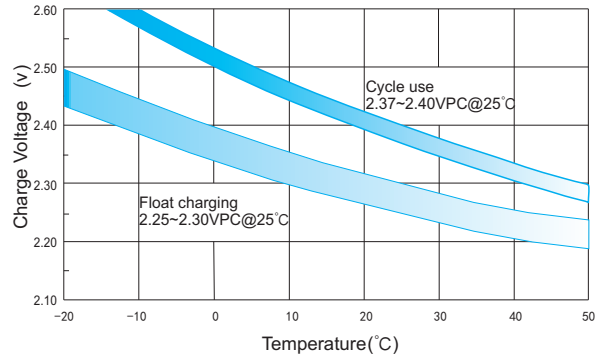
Charge Characteristic Curve for Cycle Use(IUU)



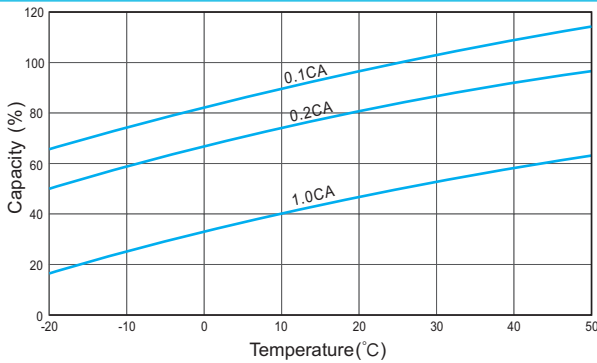
Cycle Life in Relation to Depth of Discharge



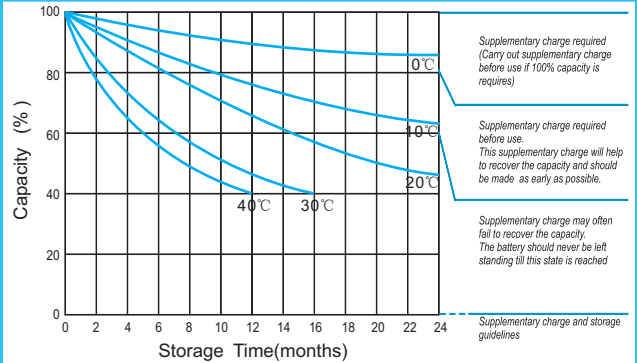
Relationship Between Charging Voltage and Temperature



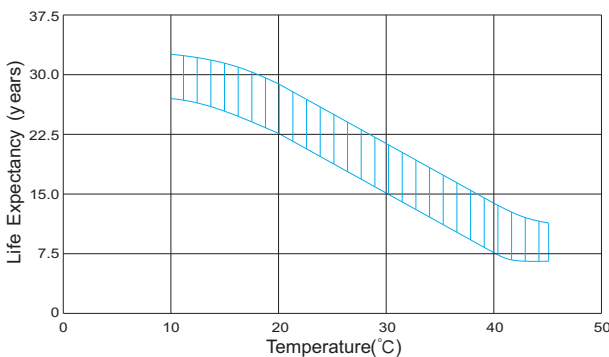
Temperature Effects on Capacity



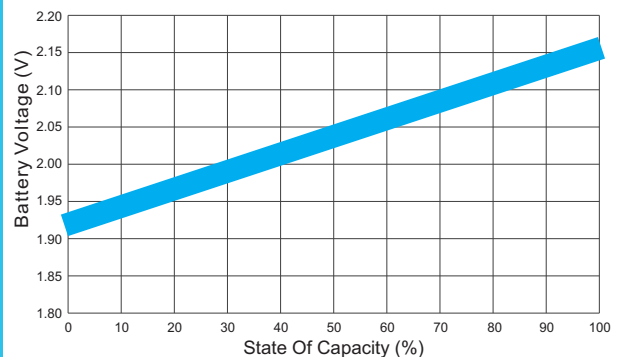
Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20°C)



(Note) All above information shall be changed without prior notice, Ritar reserves the right to explain and update the latest information.