

OPzV2-800(2V800Ah)



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.

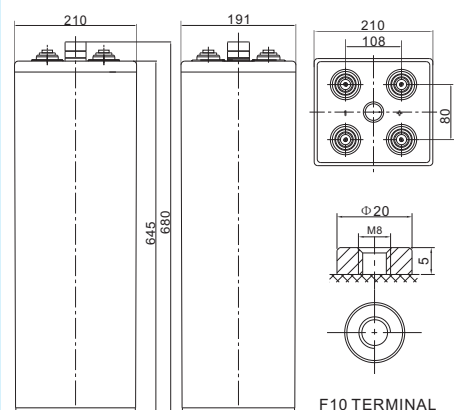


Specification

Cells Per Unit	1
Voltage Per Unit	2
Nominal Capacity	800Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 60.5Kg (Tolerance ± 3.0%)
Internal Resistance	Approx. 0.60 mΩ
Terminal	F10(M8)
Max. Discharge Current	3500A (5 sec)
Design Life	25 years
Max. Charging Current	160.0 A
Reference Capacity	C3 614.1AH C5 694.5AH C10 800.0AH C20 852.6AH
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	191±2mm (7.52 inches)
Width	210±2mm (8.27 inches)
Height	645±2mm (25.4 inches)
Total Height	680±2mm (26.8 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	1016	871.4	648.8	452.7	288.8	215.1	144.5	99.80	83.60	43.89
1.65V	960.4	811.4	611.2	446.0	284.5	212.7	143.3	99.00	82.80	43.47
1.70V	895.2	770.0	588.6	434.4	279.7	208.7	140.9	97.80	82.40	43.26
1.75V	796.5	704.2	556.0	416.4	272.9	204.7	138.9	96.61	81.20	42.63
1.80V	674.0	629.9	520.3	400.4	263.7	200.4	136.1	95.01	80.00	42.00
1.85V	548.4	519.7	447.0	357.2	240.6	184.1	126.2	88.62	74.80	39.27

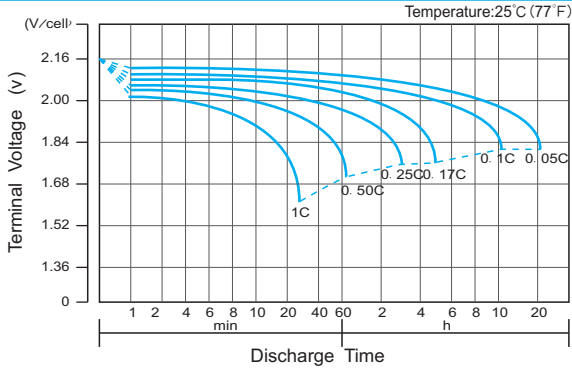
Constant Power Discharge Characteristics : WPC(25°C)

F.V/ Time	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	1708	1471	1139	848.8	548.2	411.5	279.8	195.6	165.2	86.73
1.65V	1666	1441	1123	839.6	543.4	409.1	277.8	194.8	164.0	86.10
1.70V	1579	1384	1090	823.6	534.3	402.4	275.4	192.8	162.8	85.47
1.75V	1432	1287	1040	796.4	522.7	395.6	271.0	190.8	161.2	84.63
1.80V	1232	1166	985.2	771.2	511.5	388.9	266.3	188.0	158.8	83.37
1.85V	1020	978.0	853.5	689.3	467.7	359.1	248.0	176.0	149.2	78.33

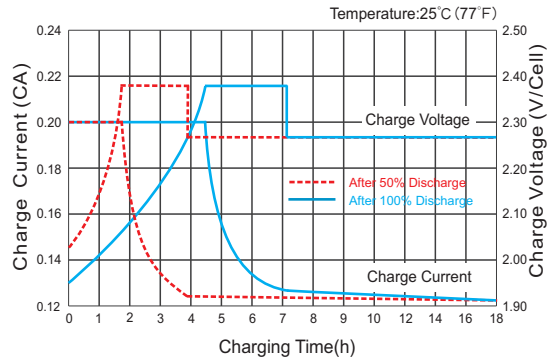
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

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.

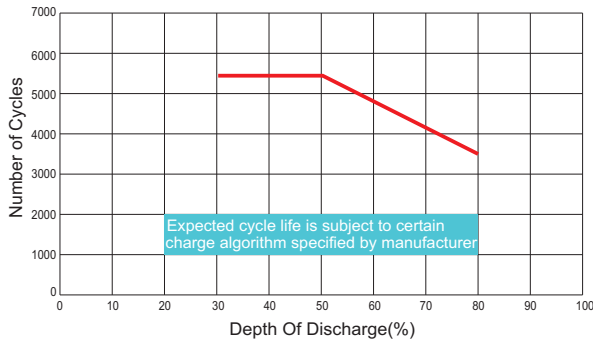
Discharge Characteristics Curve



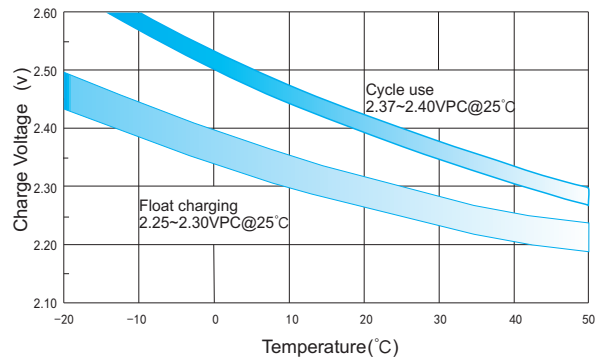
Charge Characteristic Curve for Cycle Use(IUU)



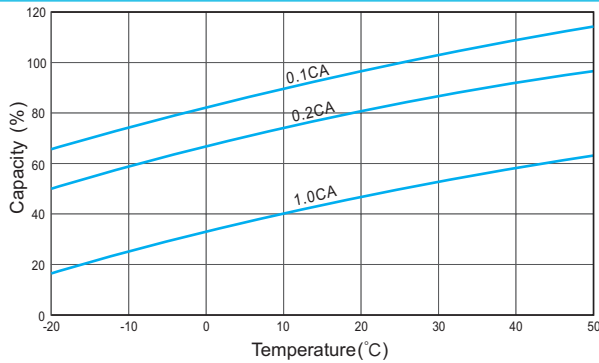
Cycle Life in Relation to Depth of Discharge



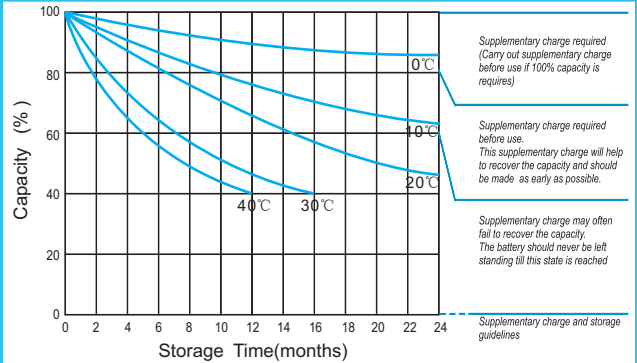
Relationship Between Charging Voltage and Temperature



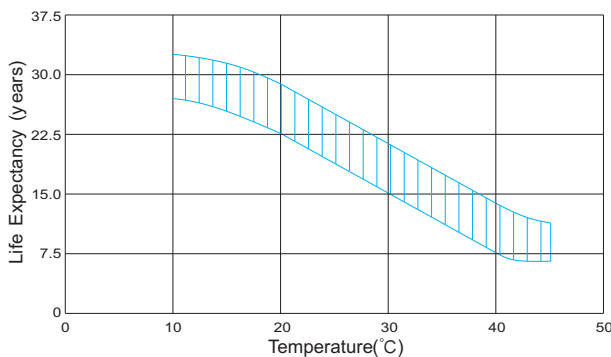
Temperature Effects on Capacity



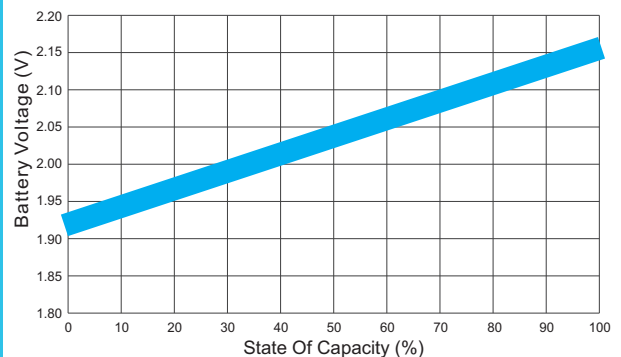
Storage Characteristics



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.