

OPzV2-1200(2V1200Ah)



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 20 years floating design life at 25 °C and It is the best solution for cyclic use under extreme operating conditions.

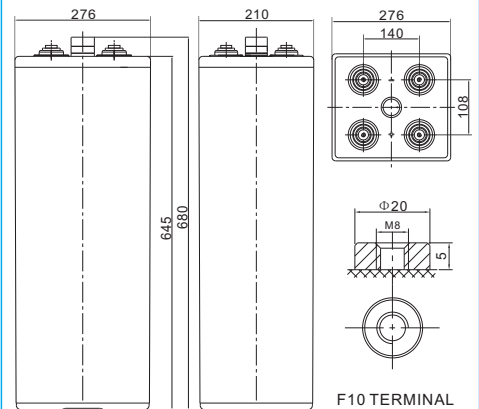


Specification

Cells Per Unit	1
Voltage Per Unit	2
Nominal Capacity	1200Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 88.5 Kg (Tolerance ± 3.0%)
Internal Resistance	Approx. 0.48 mΩ
Terminal	F10(M8)
Max. Discharge Current	4000A (5 sec)
Design Life	20 years (floating charge)
Max. Charging Current	240.0 A
Reference Capacity	C3 921.3AH C5 1042.0AH C10 1200.0AH C20 1279.0AH
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	276±2mm (10.9 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	1524	1307	973.2	679.1	433.3	322.6	216.7	149.7	125.4	65.84
1.65V	1441	1217	916.8	668.9	426.7	319.0	214.9	148.5	124.2	65.21
1.70V	1343	1155	882.8	651.5	419.5	313.1	211.3	146.7	123.6	64.89
1.75V	1195	1056	834.1	624.6	409.4	307.1	208.4	144.9	121.8	63.95
1.80V	1011	945	780.5	600.6	395.6	300.6	204.2	142.5	120.0	63.00
1.85V	822.7	779.6	670.5	535.9	361.0	276.2	189.2	132.9	112.2	58.91

Constant Power Discharge Characteristics : WPC(25°C)

F.V/ Time	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	2562	2206	1708	1273	822.3	617.2	419.7	293.4	247.8	130.1
1.65V	2498	2161	1684	1259	815.1	613.7	416.7	292.2	246.0	129.2
1.70V	2369	2077	1636	1235	801.4	603.5	413.1	289.2	244.2	128.2
1.75V	2148	1930	1560	1195	784.1	593.4	406.6	286.2	241.8	126.9
1.80V	1848	1750	1478	1157	767.3	583.3	399.4	282.0	238.2	125.1
1.85V	1530	1467	1280	1034	701.6	538.7	371.9	264.1	223.8	117.5

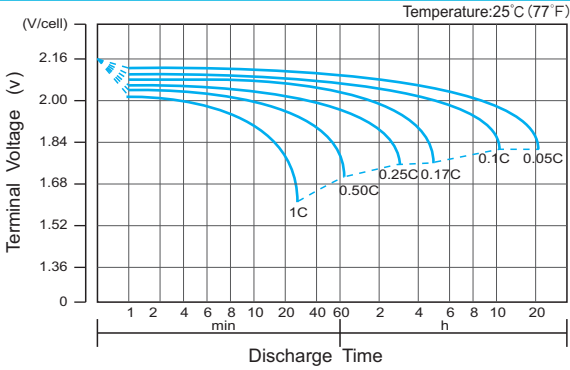
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

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.

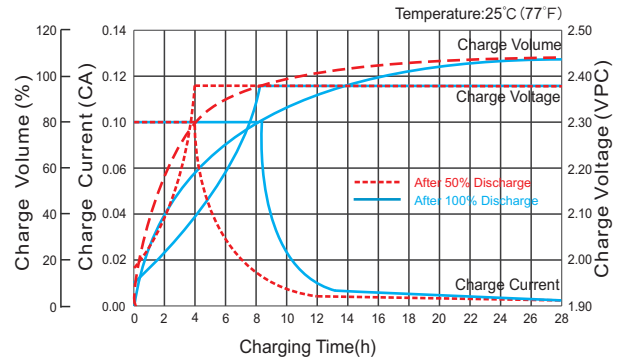
OPzV2-1200(2V1200Ah)



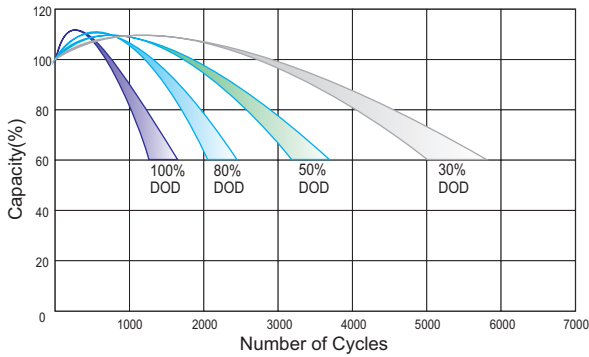
Discharge Characteristics Curve



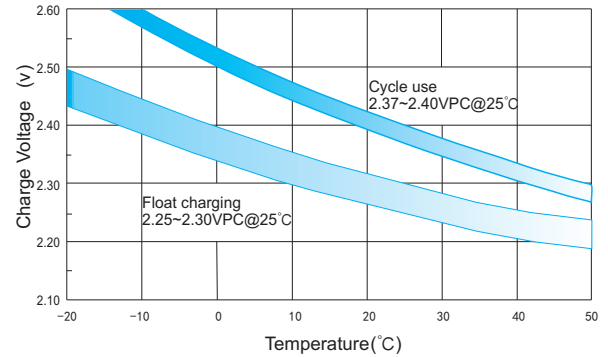
Charge Characteristic Curve for Cycle Use(IU)



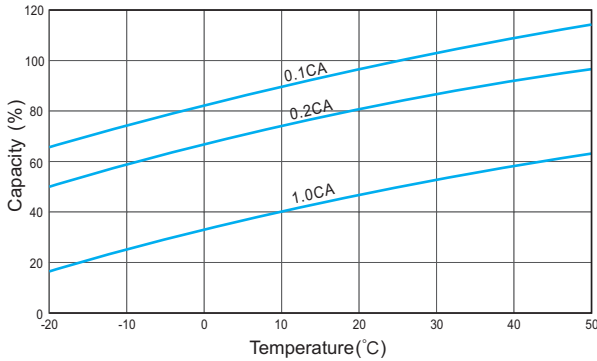
Cycle Life in Relation to Depth of Discharge



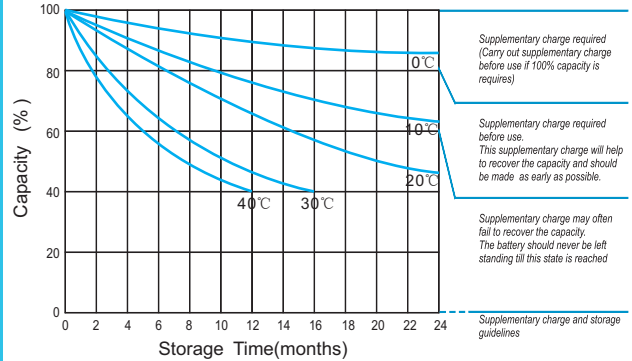
Relationship Between Charging Voltage and Temperature



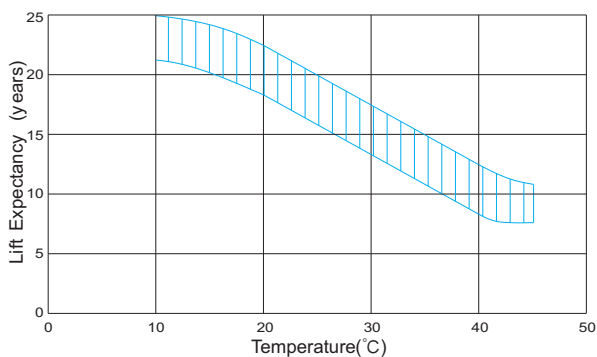
Temperature Effects on Capacity



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.