

OPzV2-3000(2V3000Ah)

RITAR®

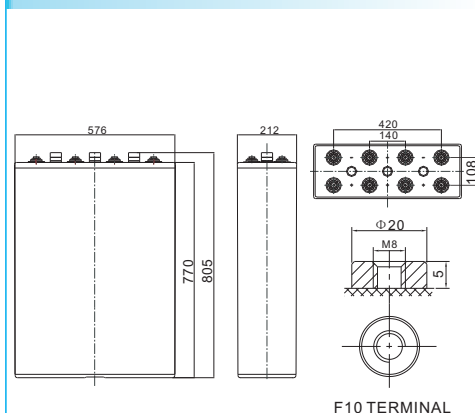
Ritar OPzV series is Valve Regulated Lead Acid battery that adopts immobilized GEL and Tubular Plate technology to offer high reliability and performance. The Battery is designed and manufactured according to DIN standards and with die-casting positive grid and patented formula of active material OPzV 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	3000Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 225.0 Kg (Tolerance ± 1%)
Internal Resistance	Approx. 0.35 mΩ
Terminal	F10(M8)
Max. Discharge Current	12000A (5 sec)
Design Life	20 years (floating charge)
Maximum Charging Current	600.0 A
Reference Capacity	C24 3180AH C48 3279AH C72 3690AH C100 3750AH C120 3816AH C240 3881AH
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 25°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Dimensions



Length	576±1mm (22.7 inches)
Width	212±1mm (8.35 inches)
Height	770±1mm (30.3 inches)
Total Height	805±1mm (31.7 inches)
Torque Value	10~12 N*m

Constant Current Discharge Characteristics : A(25°C)

F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V	1476	1170	825.0	625.8	513.0	443.4	399.0	311.4	267.0	140.2
1.87V	1650	1290	885.0	663.6	541.5	466.2	423.0	325.9	279.0	146.5
1.83V	1890	1440	960.0	707.1	570.0	486.6	438.0	340.5	291.0	152.8
1.80V	2100	1560	996.0	727.5	581.4	498.0	450.0	349.2	300.0	157.5
1.75V	2340	1671	1041	756.6	591.0	510.0	459.0	355.0	306.0	160.7
1.70V	2580	1725	1071	771.3	601.4	516.0	465.0	357.9	309.0	162.2
1.65V	2661	1833	1107	792.0	609.9	522.0	471.0	360.8	312.0	163.8
1.60V	2775	1896	1149	825.0	627.0	531.0	477.0	363.8	315.0	165.4

Constant Power Discharge Characteristics : WPC(25°C)

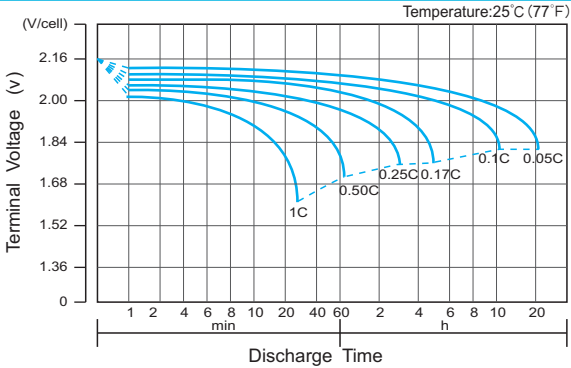
F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V	2825	2246	1595	1212	1004	873.0	789.0	622.7	544.2	285.7
1.87V	3108	2439	1691	1269	1058	915.0	834.0	648.9	567.5	297.9
1.83V	3482	2659	1800	1336	1110	951.0	861.0	672.2	587.8	308.6
1.80V	3805	2837	1860	1366	1131	972.0	882.0	686.8	602.4	316.2
1.75V	4128	2964	1921	1408	1146	996.0	897.0	695.5	611.1	320.8
1.70V	4426	2994	1969	1432	1164	1005	906.0	701.3	616.9	323.9
1.65V	4501	3127	2023	1462	1179	1014	915.0	707.1	619.8	325.4
1.60V	4556	3223	2071	1511	1209	1023	921.0	710.0	622.7	326.9

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

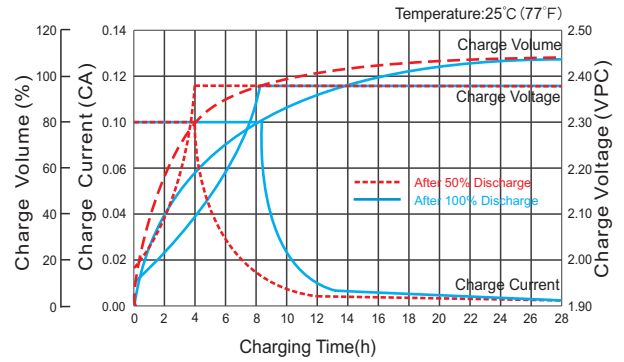
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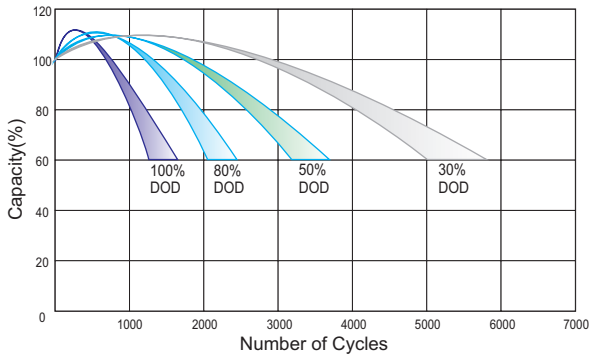
Discharge Characteristics Curve



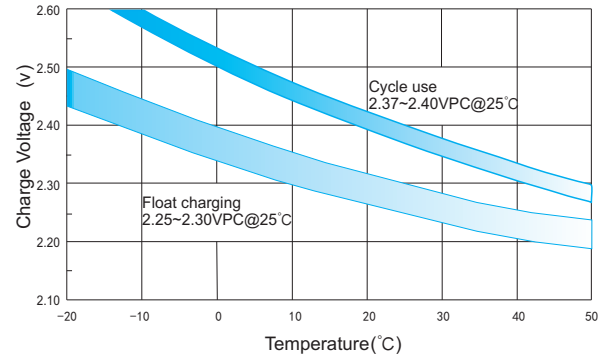
Charge Characteristic Curve for Cycle Use(IU)



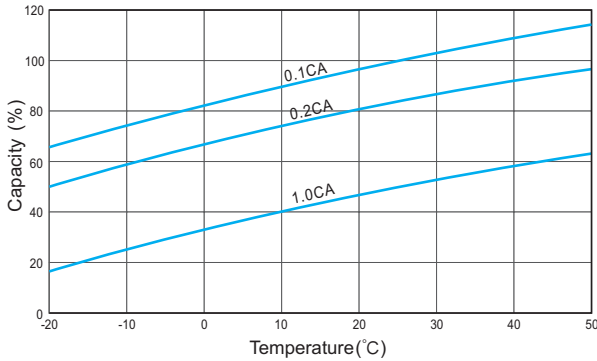
Cycle Life in Relation to Depth of Discharge



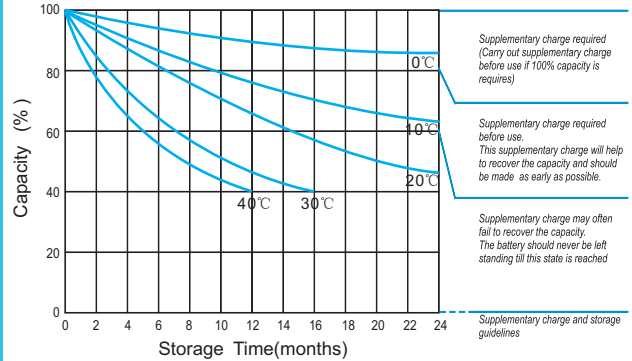
Relationship Between Charging Voltage and Temperature



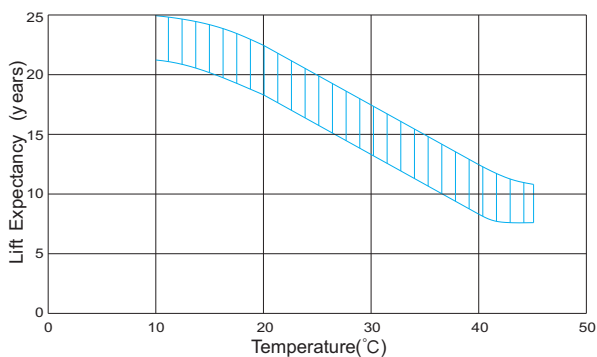
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



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

