

OPzV2-2000(2V2000Ah)

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.

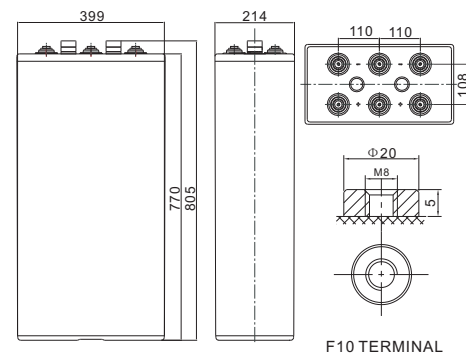


Specification

Cells Per Unit	1
Voltage Per Unit	2
Nominal Capacity	2000Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 150.0 Kg (Tolerance ± 1%)
Internal Resistance	Approx. 0.40 mΩ
Terminal	F10(M8)
Max. Discharge Current	7000A (5 sec)
Design Life	20 years (floating charge)
Maximum Charging Current	400.0 A
Reference Capacity	C24 2185AH C48 2440AH C72 2460AH C100 2490AH C120 2545AH C240 2588AH
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

Unit: mm



Length	399±1mm (15.7 inches)
Width	214±1mm (8.43 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	984.0	780.0	550.0	417.2	342.0	295.6	266.0	207.6	178.0	93.5
1.87V	1100	860.0	590.0	442.4	361.0	310.8	282.0	217.3	186.0	97.7
1.83V	1260	960.0	640.0	471.4	380.0	324.4	292.0	227.0	194.0	101.9
1.80V	1400	1040	664.0	485.0	387.6	332.0	300.0	232.8	200.0	105.0
1.75V	1560	1114	694.0	504.4	394.0	340.0	306.0	236.7	204.0	107.1
1.70V	1720	1150	714.0	514.2	400.9	344.0	310.0	238.6	206.0	108.2
1.65V	1774	1222	738.0	528.0	406.6	348.0	314.0	240.6	208.0	109.2
1.60V	1850	1264	766.0	550.0	418.0	354.0	318.0	242.5	210.0	110.3

Constant Power Discharge Characteristics : WPC(25°C)

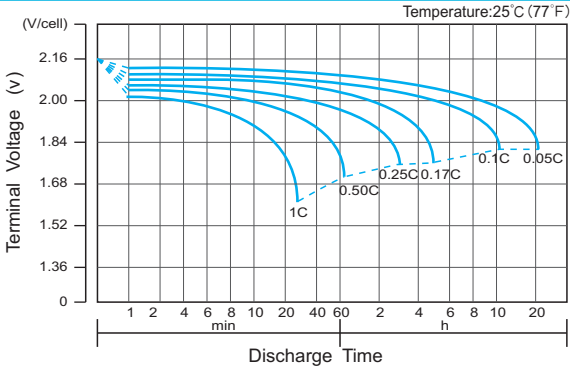
F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V	1883	1497	1063	808.0	669.3	582.0	526.0	415.2	362.8	190.5
1.87V	2072	1626	1128	846.2	705.5	610.0	556.0	432.6	378.3	198.6
1.83V	2322	1773	1200	890.4	739.7	634.0	574.0	448.1	391.9	205.7
1.80V	2537	1891	1240	910.6	753.8	648.0	588.0	457.8	401.6	210.8
1.75V	2752	1976	1280	938.6	763.8	664.0	598.0	463.7	407.4	213.9
1.70V	2951	1996	1313	954.8	775.9	670.0	604.0	467.5	411.3	215.9
1.65V	3001	2084	1349	974.8	785.9	676.0	610.0	471.4	413.2	216.9
1.60V	3037	2149	1381	1007	806.0	682.0	614.0	473.4	415.2	218.0

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

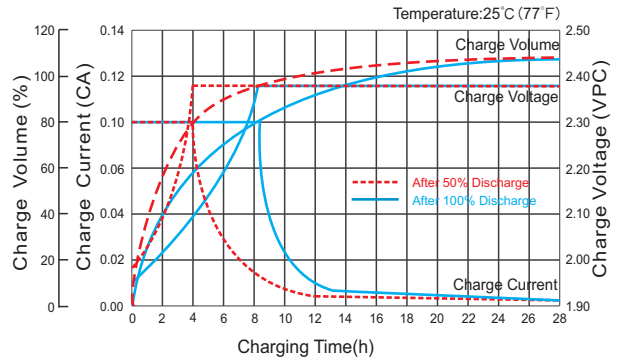
OPzV2-2000(2V2000Ah)



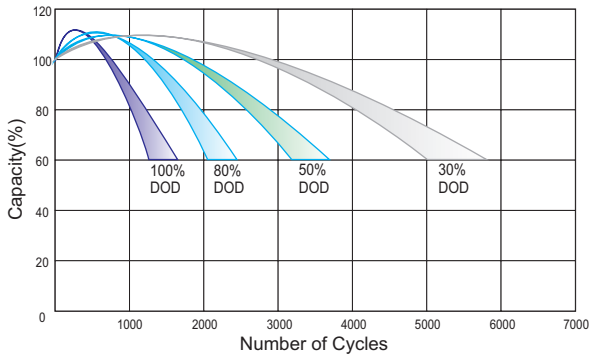
Discharge Characteristics Curve



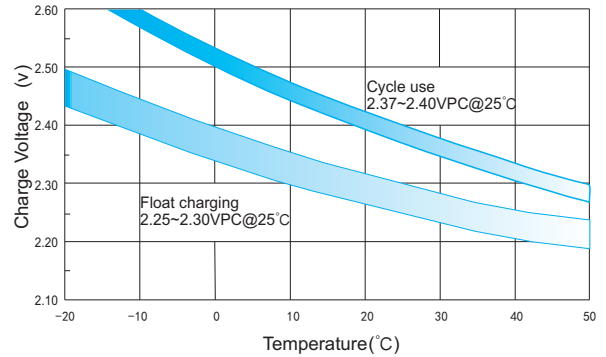
Charge Characteristic Curve for Cycle Use(IU)



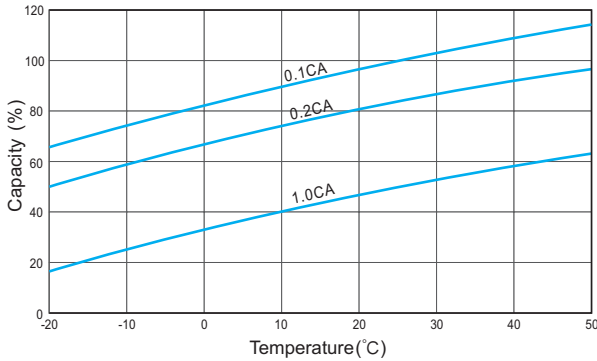
Cycle Life in Relation to Depth of Discharge



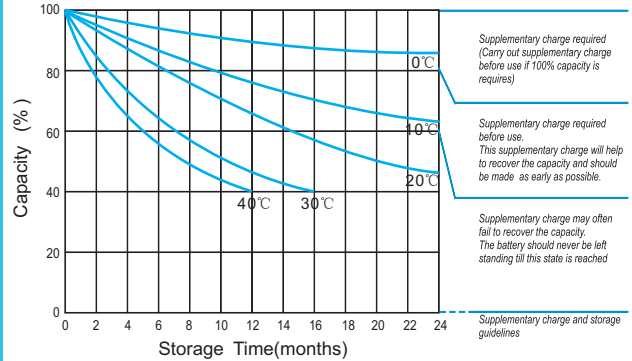
Relationship Between Charging Voltage and Temperature



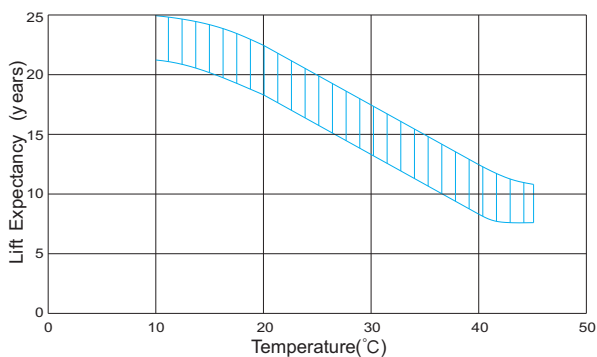
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



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

