

# OPzV2-200(2V200Ah)



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.

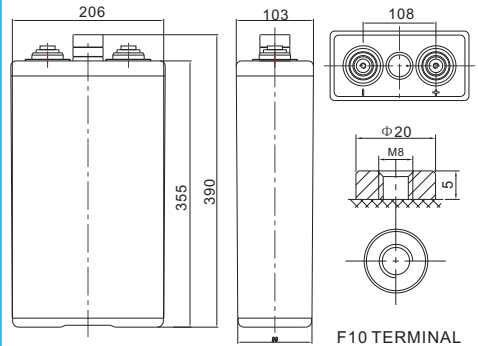


## Specification

<b>Cells Per Unit</b>	1
<b>Voltage Per Unit</b>	2
<b>Nominal Capacity</b>	200Ah@10hr-rate to 1.80V per cell @25°C
<b>Weight</b>	Approx. 16.8 Kg (Tolerance±3%)
<b>Internal Resistance</b>	Approx. 1.00 mΩ
<b>Terminal</b>	F10(M8)
<b>Max. Discharge Current</b>	1000A (5 sec)
<b>Design Life</b>	20 years (floating charge)
<b>Maximum Charging Current</b>	40.0 A
<b>Reference Capacity</b>	C24 225AH C48 250AH C72 255AH C100 275AH C120 262AH C240 266AH
<b>Float Charging Voltage</b>	2.25 V~2.30 V @ 25°C Temperature Compensation: -3mV/°C/Cell
<b>Cycle Use Voltage</b>	2.35 V~2.40 V @ 25°C Temperature Compensation: -4mV/°C/Cell
<b>Operating Temperature Range</b>	Discharge: -40°C~60°C Charge: -20°C~50°C Storage: -40°C~60°C
<b>Normal Operating Temperature Range</b>	25°C±5°C
<b>Self Discharge</b>	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.
<b>Container Material</b>	A.B.S. UL94-HB, UL94-V0 Optional.

## Dimensions

Unit: mm



Length	103±1mm (4.06 inches)
Width	206±1mm (8.11 inches)
Height	355±1mm (14.0 inches)
Total Height	390±1mm (15.4 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	98.40	78.00	55.00	41.72	34.20	29.56	26.60	20.76	17.80	9.345
1.87V	110.0	86.00	59.00	44.24	36.10	31.08	28.20	21.73	18.60	9.765
1.83V	126.0	96.00	64.00	47.14	38.00	32.44	29.20	22.70	19.40	10.19
1.80V	140.0	104.0	66.40	48.50	38.76	33.20	30.00	23.28	20.00	10.50
1.75V	156.0	111.4	69.40	50.44	39.40	34.00	30.60	23.67	20.40	10.71
1.70V	172.0	115.0	71.40	51.42	40.09	34.40	31.00	23.86	20.60	10.82
1.65V	177.4	122.2	73.80	52.80	40.66	34.80	31.40	24.06	20.80	10.92
1.60V	185.0	126.4	76.60	55.00	41.80	35.40	31.80	24.25	21.00	11.03

### Constant Power Discharge Characteristics : WPC(25°C)

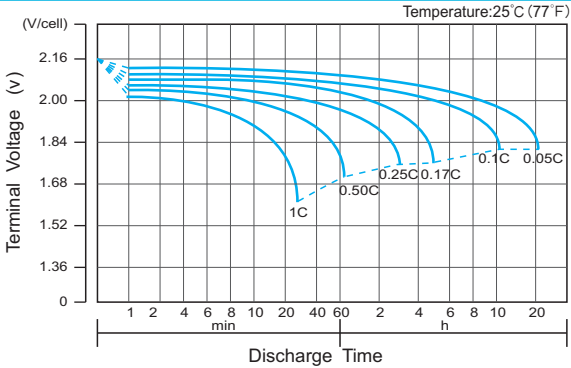
F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V	188.3	149.7	106.3	80.80	66.93	58.20	52.60	41.52	36.28	19.05
1.87V	207.2	162.6	112.8	84.62	70.55	61.00	55.60	43.26	37.83	19.86
1.83V	232.2	177.3	120.0	89.04	73.97	63.40	57.40	44.81	39.19	20.57
1.80V	253.7	189.1	124.0	91.06	75.38	64.80	58.80	45.78	40.16	21.08
1.75V	275.2	197.6	128.0	93.86	76.38	66.40	59.80	46.37	40.74	21.39
1.70V	295.1	199.6	131.3	95.48	77.59	67.00	60.40	46.75	41.13	21.59
1.65V	300.1	208.4	134.9	97.48	78.59	67.60	61.00	47.14	41.32	21.69
1.60V	303.7	214.9	138.1	100.7	80.60	68.20	61.40	47.34	41.52	21.80

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

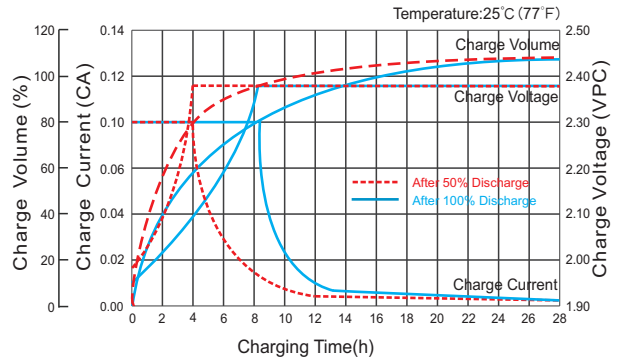
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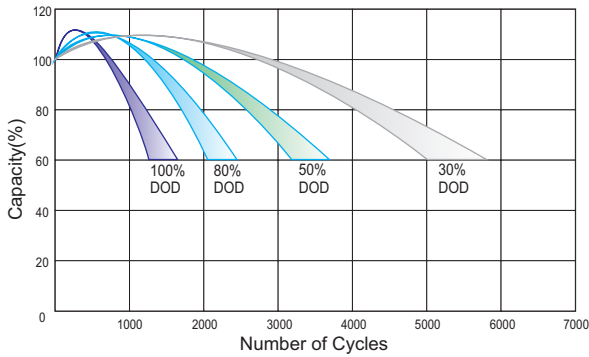
## Discharge Characteristics Curve



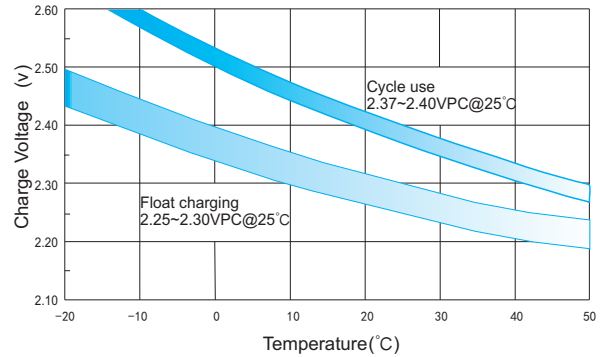
## Charge Characteristic Curve for Cycle Use(IU)



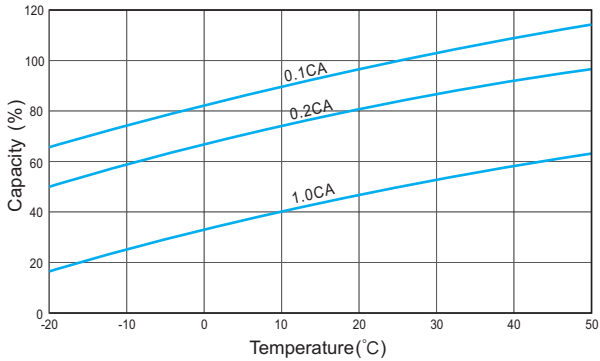
## Cycle Life in Relation to Depth of Discharge



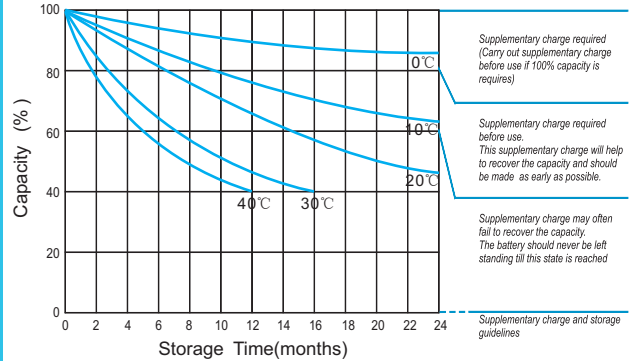
## Relationship Between Charging Voltage and Temperature



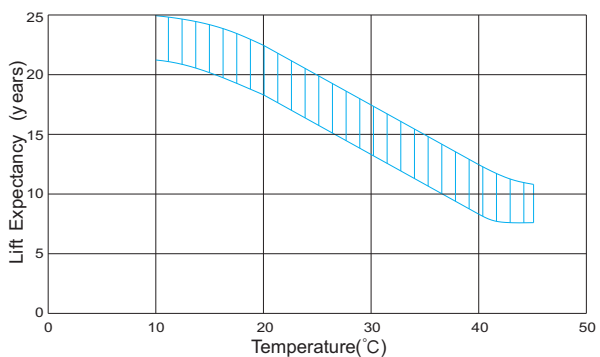
## Temperature Effects on Capacity



## Storage Characteristics



## Effect of Temperature on Long Term Life



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

