

# OPzV2-2500(2V2500Ah)

**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.

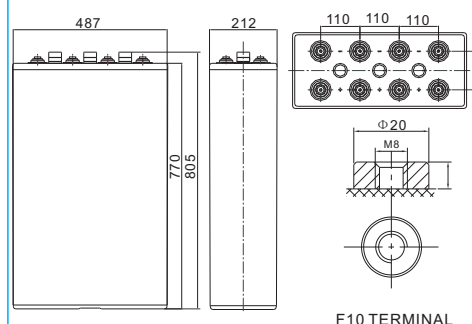


## Specification

<b>Cells Per Unit</b>	1
<b>Voltage Per Unit</b>	2
<b>Nominal Capacity</b>	2500Ah@10hr-rate to 1.80V per cell @25°C
<b>Weight</b>	Approx. 190.0 Kg (Tolerance ± 1%)
<b>Internal Resistance</b>	Approx. 0.35 mΩ
<b>Terminal</b>	F10(M8)
<b>Max. Discharge Current</b>	10000A (5 sec)
<b>Design Life</b>	20 years (floating charge)
<b>Maximum Charging Current</b>	500.0 A
<b>Reference Capacity</b>	C24 2732AH C48 3050AH C72 3080AH C100 3130AH C120 3181AH C240 3235AH
<b>Float Charging Voltage</b>	2.25 V~2.30 V @ 25°C Temperature Compensation: -3mV/°C/Cell
<b>Cycle Use Voltage</b>	2.37 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	487±1mm (19.2 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	1230	975.0	687.5	521.5	427.5	369.5	332.5	259.5	222.5	116.8
1.87V	1375	1075	737.5	553.0	451.3	388.5	352.5	271.6	232.5	122.1
1.83V	1575	1200	800.0	589.3	475.0	405.5	365.0	283.7	242.5	127.3
1.80V	1750	1300	830.0	606.3	484.5	415.0	375.0	291.0	250.0	131.3
1.75V	1950	1393	867.5	630.5	492.5	425.0	382.5	295.9	255.0	133.9
1.70V	2150	1438	892.5	642.8	501.1	430.0	387.5	298.3	257.5	135.2
1.65V	2218	1528	922.5	660.0	508.3	435.0	392.5	300.7	260.0	136.5
1.60V	2313	1580	957.5	687.5	522.5	442.5	397.5	303.1	262.5	137.8

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

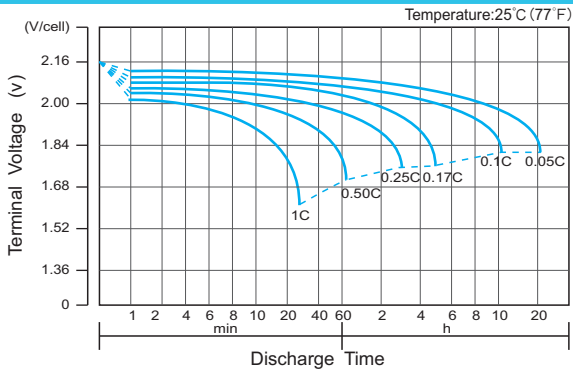
F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V	2354	1872	1329	1010	836.7	727.5	657.5	519.0	453.5	238.1
1.87V	2590	2033	1410	1058	881.9	762.5	695.0	540.8	472.9	248.3
1.83V	2902	2216	1500	1113	924.6	792.5	717.5	560.2	489.9	257.2
1.80V	3171	2364	1550	1138	942.2	810.0	735.0	572.3	502.0	263.5
1.75V	3440	2470	1600	1173	954.8	830.0	747.5	579.6	509.3	267.4
1.70V	3688	2495	1641	1194	969.8	837.5	755.0	584.4	514.1	269.9
1.65V	3751	2605	1686	1219	982.4	845.0	762.5	589.3	516.5	271.2
1.60V	3796	2686	1726	1259	1008	852.5	767.5	591.7	519.0	272.4

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

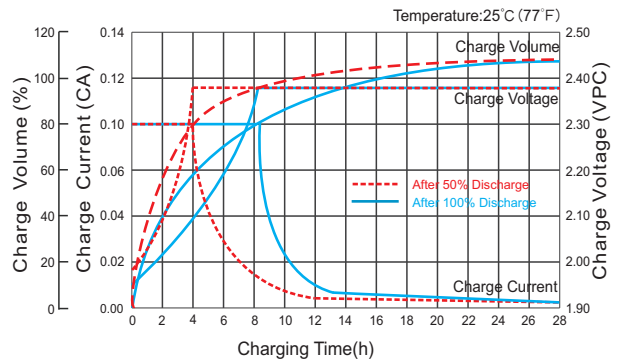
# OPzV2-2500(2V2500Ah)



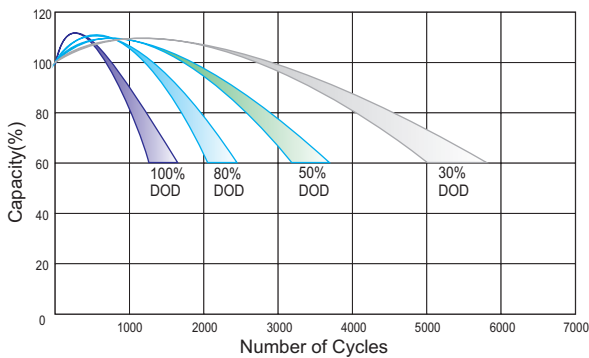
## Discharge Characteristics Curve



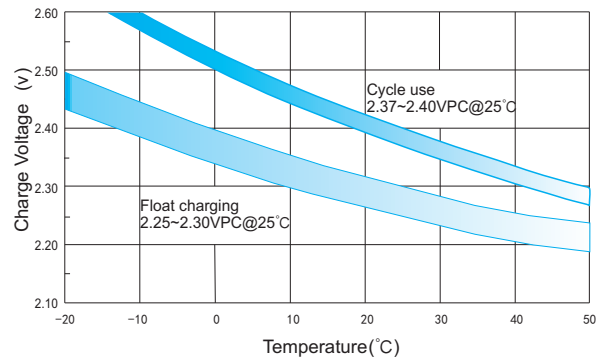
## Charge Characteristic Curve for Cycle Use(IU)



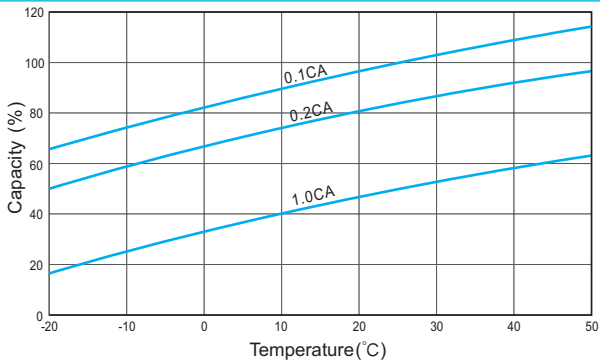
## Cycle Life in Relation to Depth of Discharge



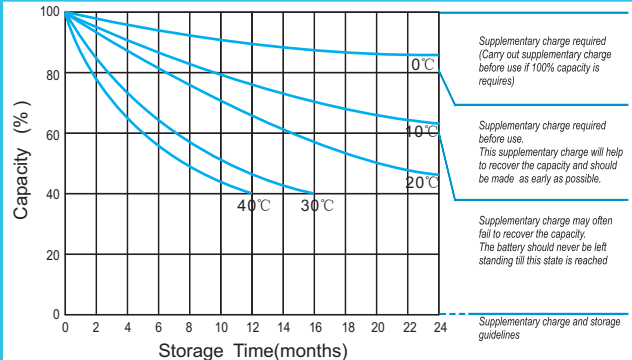
## Relationship Between Charging Voltage and Temperature



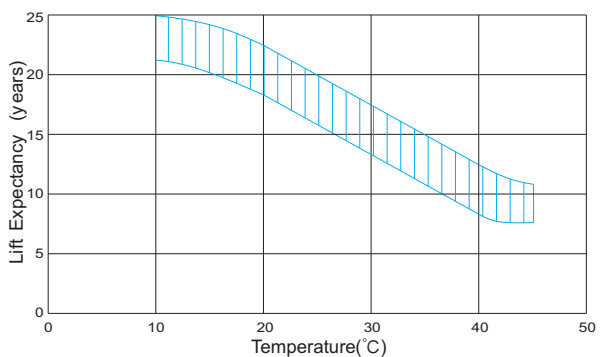
## Temperature Effects on Capacity



## Storage Characteristics



## Effect of Temperature on Long Term Life



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

