

# OPzS2-3000(2V3000Ah)

**RITAR®**

Ritar OPzS series is flooded Lead Acid battery that adopts Tubular Plate technology to offer high reliability and performance. The Battery is designed and manufactured according to standards and with DIN40736-2/IEC60896-11 positive spine and patent formula of die-casting active material. OPzS series exceeds standard values with more DIN40736-2/IEC60896-11 than 20 years floating design even more suitable for life at 25°C and is cyclic use(PV/solar, traction etc) under extreme operating conditions.

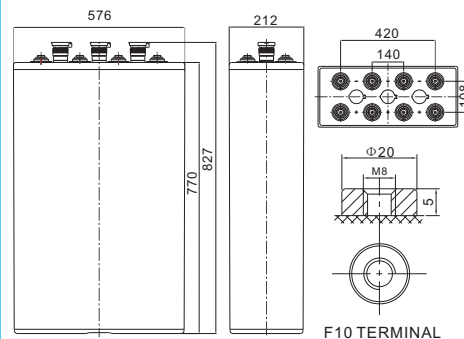


## Specification

<b>Cells Per Unit</b>	1
<b>Voltage Per Unit</b>	2
<b>Nominal Capacity</b>	3000Ah@10hr-rate to 1.85V per cell @25°C
<b>Weight</b>	Without Electrolyte 166.7kg/With Electrolyte 226.8kg
<b>Internal Resistance</b>	Approx. 0.11 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>	300.0 A
<b>Reference Capacity</b>	C24 3591.0AH C48 3957.5AH C72 3997.0AH C100 4250.6AH C120 4335.6AH C240 4408.2AH
<b>Float Charging Voltage</b>	2.23 V~2.25 V @ 25°C Temperature Compensation: -3mV/°C/Cell
<b>Cycle Use Voltage</b>	2.40 V~2.45 V @ 25°C Temperature Compensation: -4mV/°C/Cell
<b>Operating Temperature Range</b>	Discharge: -15°C~50°C Charge: 0°C~40°C Storage: -15°C~50°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 3.5% at 25°C. Please charged batteries before using.
<b>Container Material</b>	A.B.S. UL94-HB, UL94-V0 Optional.

## Dimensions

Unit: mm



Length	576±1mm (22.7 inches)
Width	212±1mm (8.35 inches)
Height	770±1mm (30.3 inches)
Total Height	827±1mm (32.6 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	1596	1265	892.2	680.1	538.7	478.8	419.0	326.9	280.4	161.2
1.87V	1784	1395	957.1	724.0	568.6	506.4	444.2	342.2	293.0	168.4
1.83V	2044	1557	1038	774.4	598.5	529.2	459.9	357.5	305.6	175.7
1.80V	2271	1687	1077	797.2	610.5	541.5	472.5	366.7	315.0	181.1
1.75V	2531	1807	1126	822.7	620.6	551.2	482.0	372.8	321.3	184.7
1.70V	2790	1866	1158	842.2	631.4	559.8	488.3	375.8	324.5	186.6
1.65V	2878	1982	1197	863.1	640.4	567.5	494.6	378.9	327.6	188.4
1.60V	3001	2051	1243	892.1	658.4	579.6	500.9	381.9	330.8	190.2

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

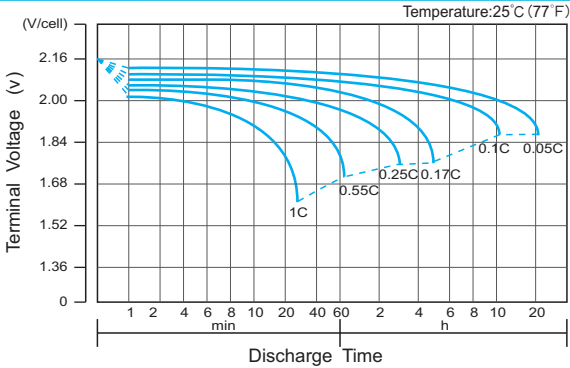
F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V	3055	2429	1725	1322	1054	941.1	828.5	653.9	571.4	328.5
1.87V	3362	2638	1829	1398	1111	993.4	875.7	681.4	595.8	342.6
1.83V	3766	2876	1947	1478	1165	1035	904.1	705.8	617.2	354.9
1.80V	4115	3068	2012	1517	1187	1057	926.1	721.1	632.5	363.7
1.75V	4464	3205	2077	1553	1203	1072	941.9	730.3	641.7	368.9
1.70V	4787	3238	2129	1585	1222	1087	951.3	736.4	647.8	372.4
1.65V	4868	3381	2188	1618	1238	1099	960.8	742.5	650.8	374.2
1.60V	4927	3486	2240	1658	1269	1119	967.1	745.5	653.9	375.9

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

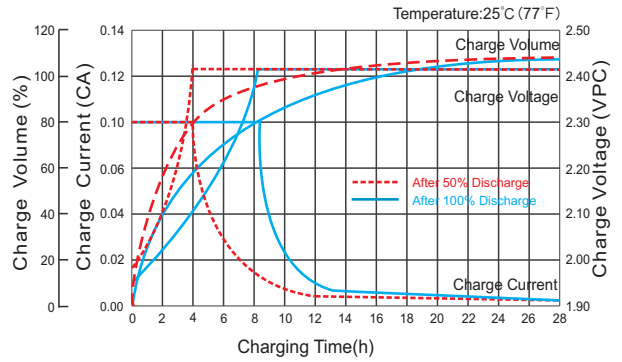
# OPzS2-3000(2V3000Ah)



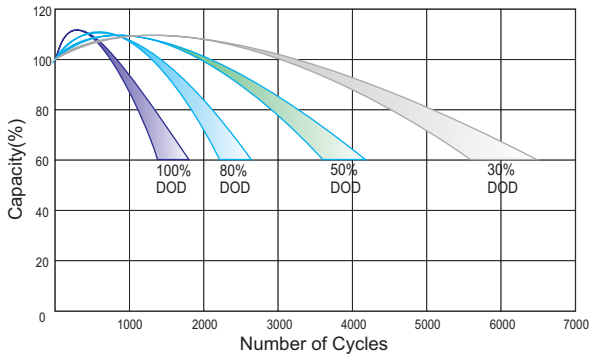
## Discharge Characteristics Curve



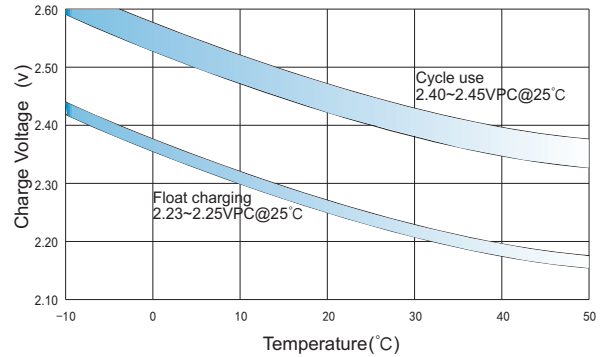
## Charge Characteristic Curve for Cycle Use(IU)



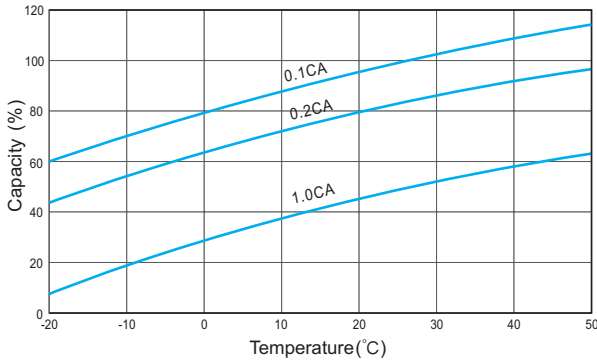
## Cycle Life in Relation to Depth of Discharge



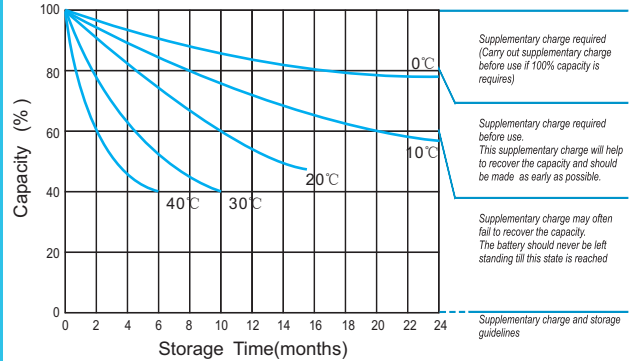
## Relationship Between Charging Voltage and Temperature



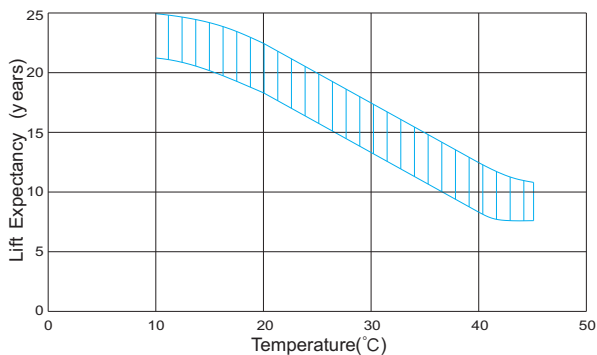
## Temperature Effects on Capacity



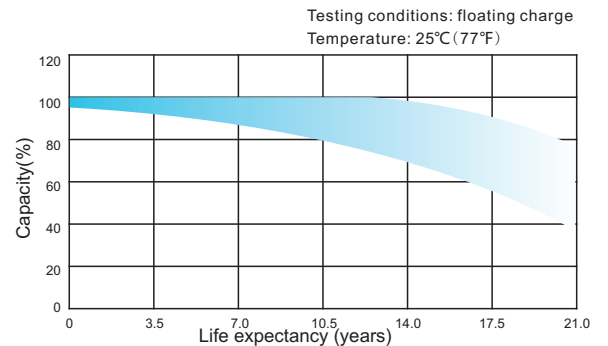
## Storage Characteristics



## Effect of Temperature on Long Term Life



## Life Characteristics Of Standby Use



For Battery Sales + EPA Battery Recycling and AC / DC Power Services, please contact:

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