

# OPzS2-1500(2V1500Ah)

**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.

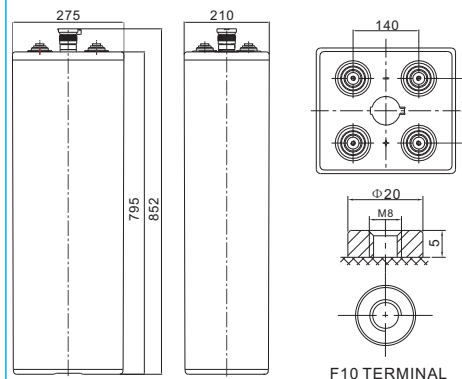


## Specification

<b>Cells Per Unit</b>	1
<b>Voltage Per Unit</b>	2
<b>Nominal Capacity</b>	1500Ah@10hr-rate to 1.85V per cell @25°C
<b>Weight</b>	Without Electrolyte 83.5kg/With Electrolyte 113.5kg
<b>Internal Resistance</b>	Approx. 0.21 mΩ
<b>Terminal</b>	F10(M8)
<b>Max. Discharge Current</b>	5000A (5 sec)
<b>Design Life</b>	20 years (floating charge)
<b>Maximum Charging Current</b>	150.0 A
<b>Reference Capacity</b>	C24 1795.5AH C48 2019.9AH C72 2120.9AH C100 2169.6AH C120 2213.0AH C240 2250.0AH
<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	275±1mm (10.8 inches)
Width	210±1mm (8.27 inches)
Height	795±1mm (31.3 inches)
Total Height	852±1mm (33.5 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	798.1	632.7	446.1	340.0	269.3	239.4	209.5	163.5	140.2	80.61
1.87V	892.2	697.6	478.6	362.0	284.3	253.2	222.1	171.1	146.5	84.21
1.83V	1022	778.7	519.1	387.2	299.3	264.6	230.0	178.7	152.8	87.86
1.80V	1136	843.6	538.6	398.6	305.2	270.7	236.3	183.3	157.5	90.56
1.75V	1265	903.6	562.9	411.3	310.3	275.6	241.0	186.4	160.7	92.36
1.70V	1395	932.8	579.1	421.1	315.7	279.9	244.1	187.9	162.2	93.30
1.65V	1439	991.2	598.6	431.6	320.2	283.8	247.3	189.4	163.8	94.20
1.60V	1501	1025	621.3	446.0	329.2	289.8	250.4	191.0	165.4	95.10

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

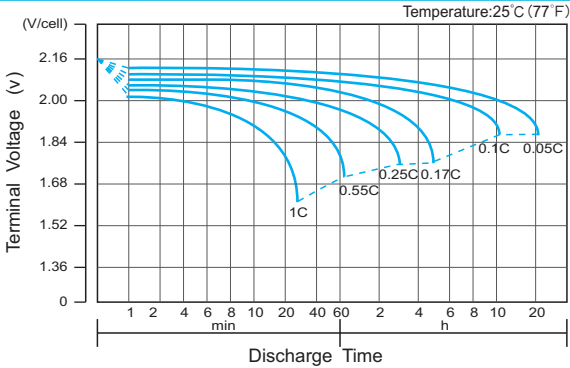
F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V	1528	1215	862.5	661.2	527.1	470.6	414.2	326.9	285.7	164.3
1.87V	1681	1319	914.6	699.2	555.6	496.7	437.9	340.7	297.9	171.3
1.83V	1883	1438	973.3	738.8	582.5	517.3	452.0	352.9	308.6	177.4
1.80V	2058	1534	1006	758.5	593.6	528.4	463.1	360.5	316.2	181.8
1.75V	2232	1603	1039	776.3	601.5	536.1	470.9	365.1	320.8	184.5
1.70V	2393	1619	1065	792.4	611.0	543.4	475.7	368.2	323.9	186.2
1.65V	2434	1691	1094	808.9	618.9	549.4	480.4	371.2	325.4	187.1
1.60V	2463	1743	1120	828.9	634.7	559.3	483.5	372.8	326.9	188.0

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

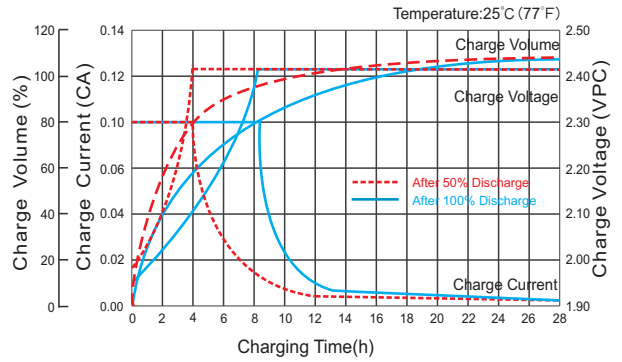
# OPzS2-1500(2V1500Ah)



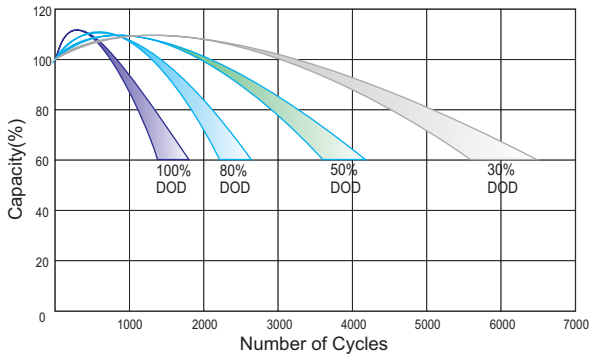
## Discharge Characteristics Curve



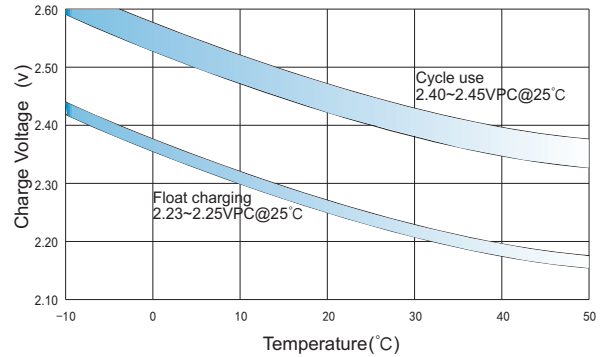
## Charge Characteristic Curve for Cycle Use(IU)



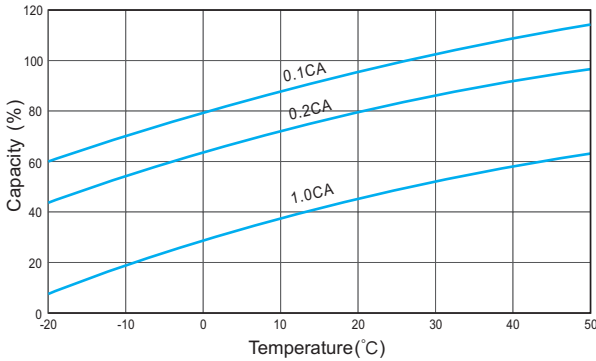
## Cycle Life in Relation to Depth of Discharge



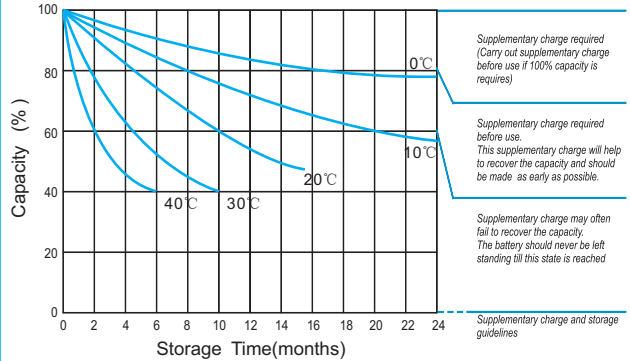
## Relationship Between Charging Voltage and Temperature



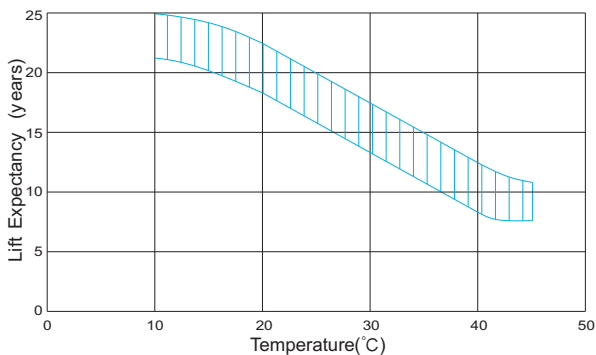
## Temperature Effects on Capacity



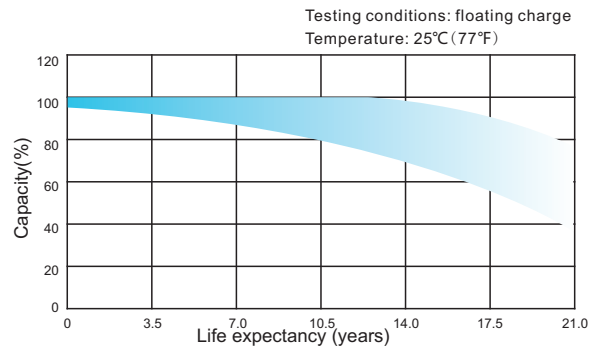
## Storage Characteristics



## 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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