

OPzS2-2000(2V2000Ah)



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/IEC60896 positive spine and patent formula of die-casting active material. The OPzS series batteries offer 400% more cyclic life than the standby series. It is suitable for solar and wind renewable energy storage, traction etc. The OPzS series is the best choice of energy storage system in high altitude area.

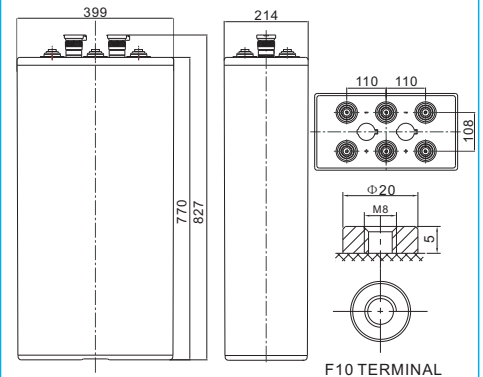
Specification

Cells Per Unit	1
Voltage Per Unit	2V
Nominal Capacity	2000Ah@10hour-rate to 1.80V per cell @25°C
Weight	Without Electrolyte 119.0 kg(Tolerance±5%) With Electrolyte 153.4kg (Tolerance±5%)
Internal Resistance	≤0.17 mΩ (Full Charge Condition @25°C)
Terminal	Default F10(M8)
Max. Discharge Current	7500A (5 sec)
Design Life	20 years
Max. Charging Current	200.0 A
Reference Capacity	C ₃ 1528.5Ah C ₅ 1731.0Ah C ₁₀ 2000.0Ah C ₂₀ 2420.0Ah
Float Charging Voltage	2.23 V~2.25 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	2.40 V~2.45 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -15°C~50°C Charge: 0°C~40°C Storage: -15°C~50°C
Normal Operating Temperature Range	25°C±5°C
Self Discharge	OPzS series is flooded Lead Acid battery. It can be stored for up to 2 years before filling acid. Monthly Self-discharge ratio is less than 3.5% at 20°C. Please charged batteries before using.
Container Material	S.A.N. UL94-HB, UL94-V0 Optional.



Dimensions

Unit: mm



Length	399±2mm (15.7 inches)
Width	214±2mm (8.43 inches)
Height	770±2mm (30.3 inches)
Total Height	827±2mm (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
1.60V	2110	1361	806.1	586.9	452.5	379.5	330.7	260.2	218.9	125.9
1.65V	2046	1281	779.9	572.7	446.2	374.3	326.5	258.1	216.8	124.7
1.70V	1890	1241	758.1	559.4	438.5	368.6	322.3	256.0	214.7	123.5
1.75V	1696	1159	725.3	542.1	431.4	362.1	315.9	251.8	210.5	121.0
1.80V	1531	1033	671.8	509.5	412.4	346.2	302.3	240.2	200.0	115.0
1.85V	1277	885.7	600.8	462.5	380.6	320.2	280.1	224.5	187.4	107.8

Constant Power Discharge Characteristics : W/Cell(25°C)

F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	3570	2322	1473	1100	874.7	734.8	642.4	509.8	435.0	250.1
1.65V	3510	2223	1434	1078	863.5	726.7	636.1	505.6	432.9	248.9
1.70V	3333	2201	1399	1056	850.1	717.0	629.8	501.4	428.8	246.6
1.75V	3073	2107	1355	1032	838.9	706.7	619.3	495.2	422.7	243.1
1.80V	2851	1930	1271	977.9	804.2	678.0	595.0	476.3	405.4	233.1
1.85V	2444	1700	1161	899.3	745.0	629.3	554.0	449.0	381.9	219.6

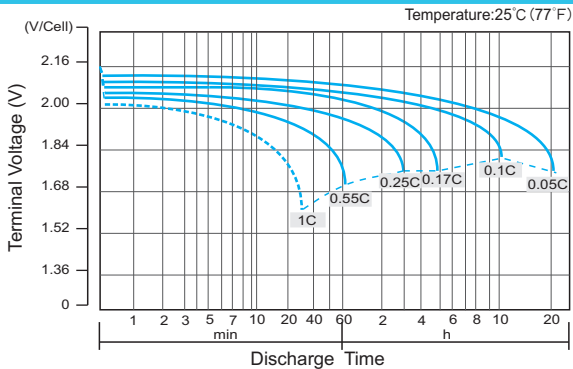
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

The battery must be fully charged before the capacity test. The C₁₀ should reach 95% after the first cycle and 100% after the third cycle.

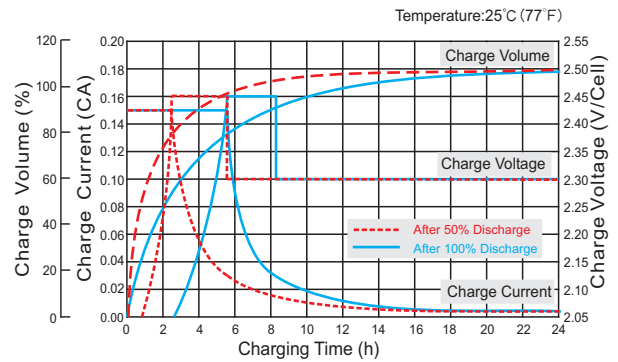
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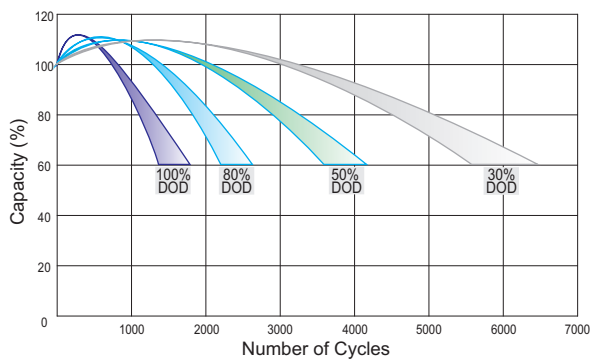
Discharge Characteristics Curve



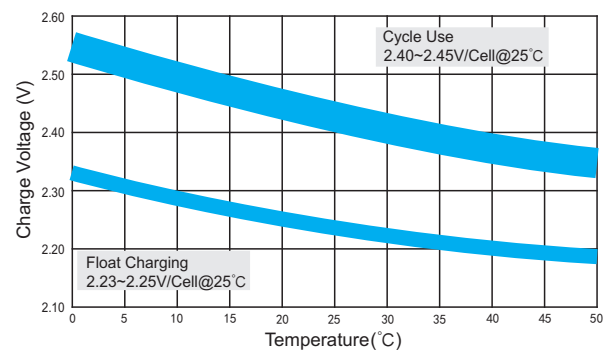
Charge Characteristic Curve for Cycle Use(IUU)



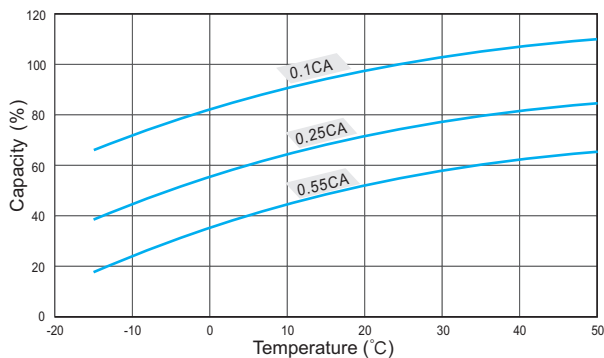
Cycle Life in Relation to Depth of Discharge



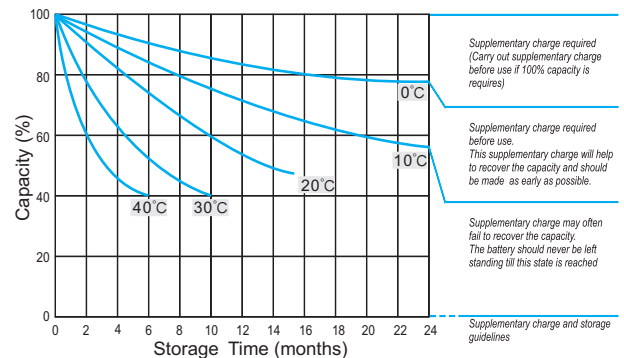
Relationship Between Charging Voltage and Temperature



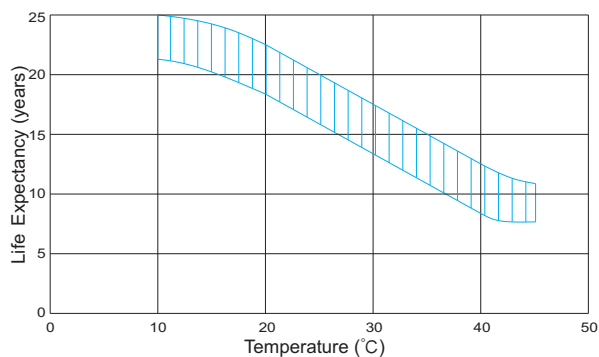
Temperature Effects on Capacity



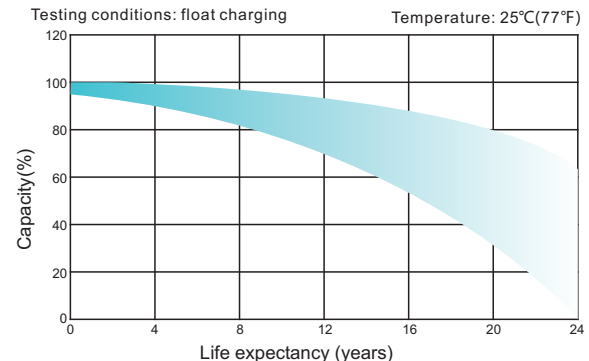
Storage Characteristics



Effect of Temperature on Long Term Life



Life Characteristics Of Standby Use



(Note) All above information shall be changed without prior notice, RITAR reserves the right to explain and update the latest information.