OPzS2-800(2V800Ah)

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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.

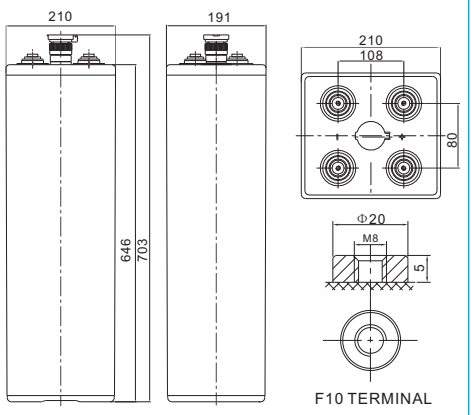
ISO 9001 ISO 14001 ISO 45001

Specification

Cells Per Unit	1
Voltage Per Unit	2V
Nominal Capacity	800Ah@10hour-rate to 1.80V per cell @25℃
Weight	Without Electrolyte 50.5 kg(Tolerance±5%) With Electrolyte 64.3kg (Tolerance±5%)
Internal Resistance	≤0.35 mΩ(Full Charge Condition @25℃)
Terminal	Default F10(M8)
Max. Discharge Current	3200A (5 sec)
Design Life	20 years
Max. Charging Current	120.0 A
Reference Capacity	C_3 611.4Ah C_5 692.5Ah C_{10} 800.0Ah C_{20} 968.0Ah
Float Charging Voltage	2.23 V~2.25 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	2.40 V~2.45 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -15℃~50℃ Charge: 0℃~40℃ Storage: -15℃~50℃
Normal Operating Temperature Range	25℃±5℃
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℃. Please charged batteries before using.
Container Material	S.A.N. UL94-HB, UL94-V0 Optional.

Dimensions

Unit: mm



Length	191±2mm (7.52 inches)
Width	210±2mm (8.27 inches)
Height	646±2mm (25.4 inches)
Total Height	703±2mm (27.7 inches)
Torque Value	10~12 N*m

Constant Current Discharge Characteristics :A(25℃)

F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	844.2	544.5	322.5	234.8	181.0	151.8	132.3	104.1	87.6	50.4
1.65V	818.5	512.4	312.0	229.1	178.5	149.7	130.6	103.2	86.7	49.9
1.70V	755.8	496.4	303.2	223.8	175.4	147.4	128.9	102.4	85.9	49.4
1.75V	678.3	463.4	290.1	216.8	172.6	144.8	126.4	100.7	84.2	48.4
1.80V	612.6	413.3	268.7	203.8	164.9	138.5	120.9	96.1	80.0	46.0
1.85V	510.8	354.3	240.3	185.0	152.3	128.1	112.1	89.8	74.9	43.1

Constant Power Discharge Characteristics : W/Cell(25℃)

F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	1428	928.7	589.3	440.1	349.9	293.9	257.0	203.9	174.0	100.0
1.65V	1404	889.3	573.5	431.1	345.4	290.7	254.4	202.3	173.2	99.6
1.70V	1333	880.4	559.4	422.3	340.0	286.8	251.9	200.6	171.5	98.6
1.75V	1229	842.8	541.9	412.6	335.6	282.7	247.7	198.1	169.1	97.2
1.80V	1140	771.9	508.5	391.1	321.7	271.2	238.0	190.5	162.1	93.2
1.85V	977.7	680.2	464.6	359.7	298.0	251.7	221.6	179.6	152.7	87.8

(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 C_{10} should reach 95% after the first cycle and 100% after the third cycle.

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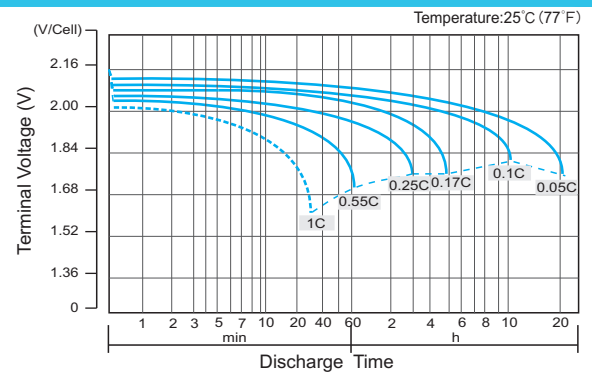
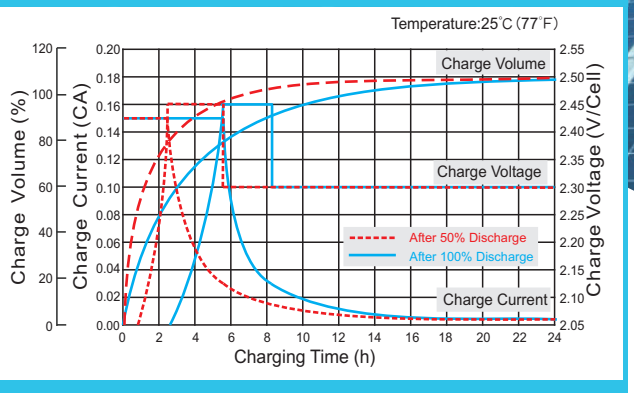
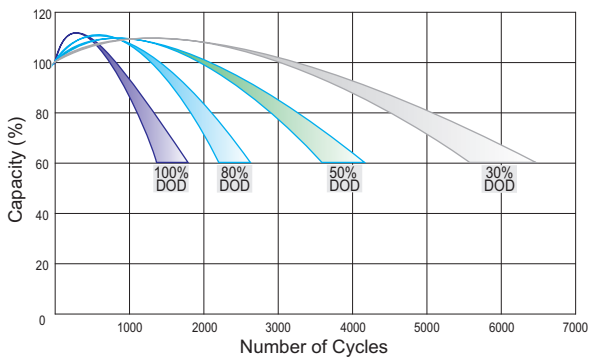
Discharge Characteristics Curve



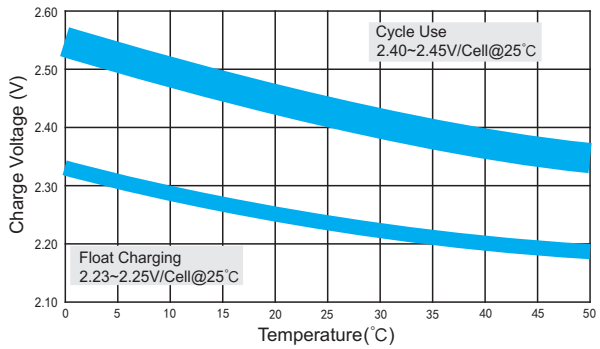
Charge Characteristic Curve for Cycle Use(IUU)



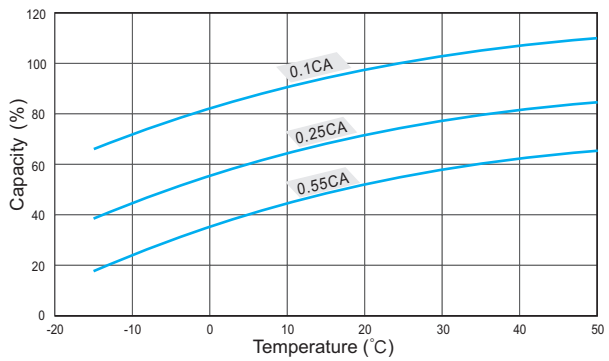
Cycle Life in Relation to Depth of Discharge



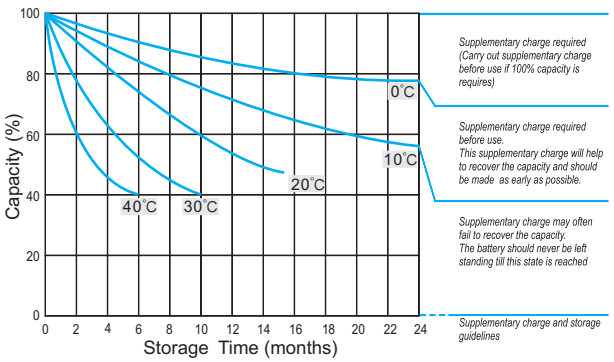
Relationship Between Charging Voltage and Temperature



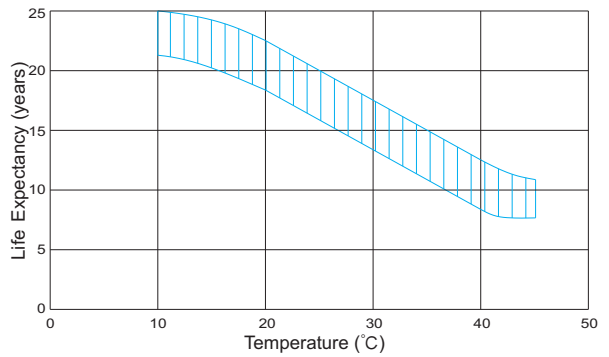
Temperature Effects on Capacity



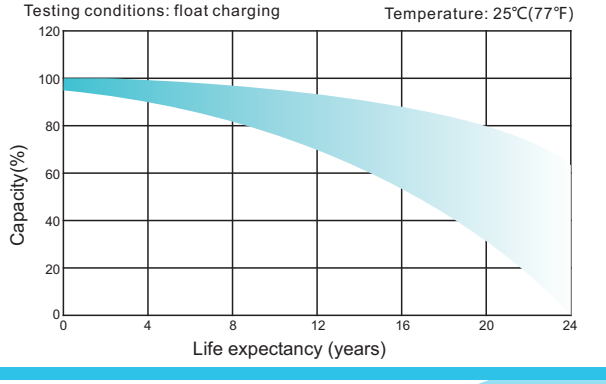
Storage Characteristics



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.

HENGYANG RITAR POWER CO.,LTD.
RITAR POWER (VIETNAM) CO.,LTD.
URL: www.ritarpower.com

Add: 10th Floor, Tower C, 1st Building, Software Industry Base, No.81, Xuefu Road, Nanshan District, Shenzhen, Guangdong, China 518057
Tel: +86-755-33981668/83475380 Fax: +86-755-83475180 E-mail: sales@ritarpower.com

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