

OPzS2-100(2V100Ah)



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.

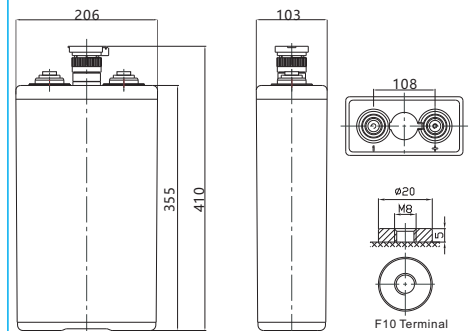
Specification

Cells Per Unit	1
Voltage Per Unit	2
Nominal Capacity	100Ah@10hr-rate to 1.85V per cell @25°C
Weight	Without Electrolyte 9.5 kg/With Electrolyte 13.8kg
Internal Resistance	Approx. 0.95 mΩ
Terminal	F10(M8)
Max. Discharge Current	500A (5 sec)
Design Life	20 years (floating charge)
Maximum Charging Current	15 A
Reference Capacity	C24 119.7AH C48 134.7AH C72 141.4AH C100 144.6AH C120 147.5AH C240 150.0AH
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 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.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



Dimensions

Unit: mm



Length	103±2mm (4.01 inches)
Width	206±2mm (8.11 inches)
Height	355±2mm (14.0 inches)
Total Height	410±2mm (16.1 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	53.21	42.18	29.74	22.67	17.96	15.96	13.97	10.90	9.345	5.374
1.87V	59.48	46.50	31.90	24.13	18.95	16.88	14.81	11.41	9.765	5.614
1.83V	68.13	51.91	34.61	25.81	19.95	17.64	15.33	11.92	10.19	5.857
1.80V	75.71	56.24	35.91	26.57	20.35	18.05	15.75	12.22	10.50	6.037
1.75V	84.36	60.24	37.53	27.42	20.69	18.37	16.07	12.43	10.71	6.157
1.70V	93.01	62.19	38.61	28.07	21.05	18.66	16.28	12.53	10.82	6.220
1.65V	95.93	66.08	39.91	28.77	21.35	18.92	16.49	12.63	10.92	6.280
1.60V	100.0	68.35	41.42	29.74	21.95	19.32	16.70	12.73	11.03	6.340

Constant Power Discharge Characteristics : WPC(25°C)

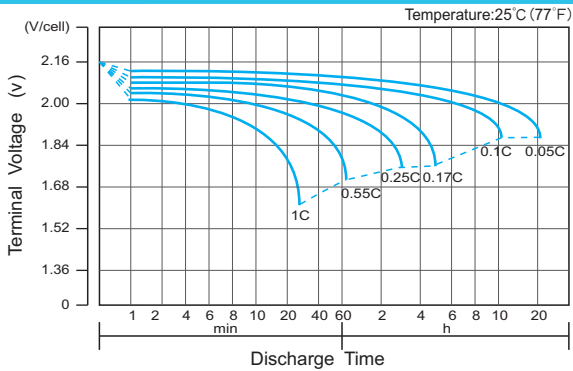
F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V	101.8	80.97	57.50	44.08	35.14	31.37	27.62	21.80	19.05	10.95
1.87V	112.1	87.93	60.98	46.61	37.04	33.11	29.19	22.71	19.86	11.42
1.83V	125.5	95.87	64.89	49.26	38.83	34.49	30.14	23.53	20.57	11.83
1.80V	137.2	102.3	67.06	50.57	39.57	35.23	30.87	24.04	21.08	12.12
1.75V	148.8	106.8	69.24	51.75	40.10	35.74	31.40	24.34	21.39	12.30
1.70V	159.6	107.9	70.98	52.83	40.73	36.23	31.71	24.55	21.59	12.41
1.65V	162.3	112.7	72.93	53.93	41.26	36.63	32.03	24.75	21.69	12.47
1.60V	164.2	116.2	74.67	55.26	42.32	37.29	32.24	24.85	21.80	12.53

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

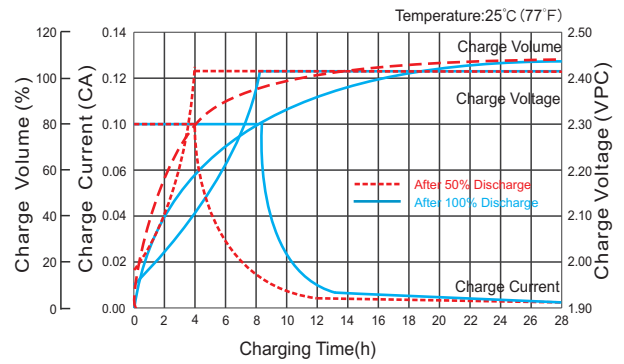
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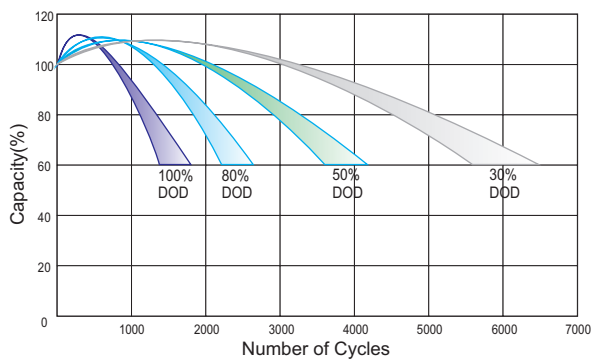
Discharge Characteristics Curve



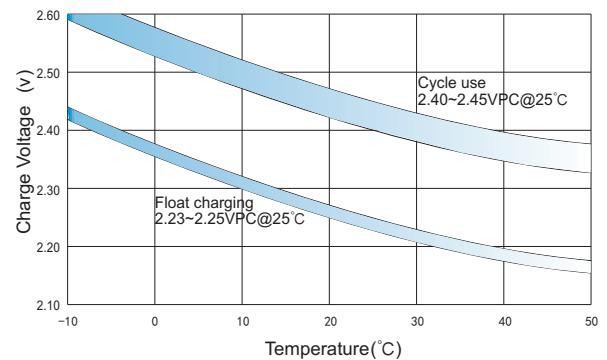
Charge Characteristic Curve for Cycle Use(IU)



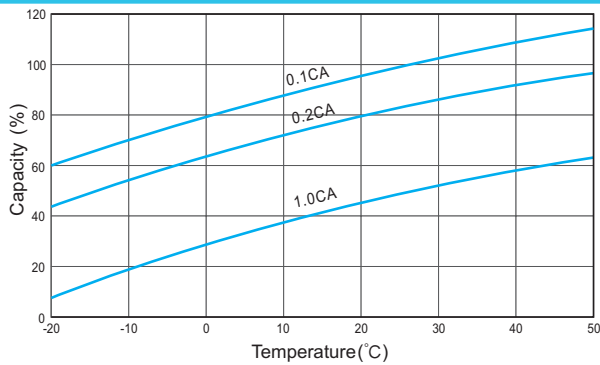
Cycle Life in Relation to Depth of Discharge



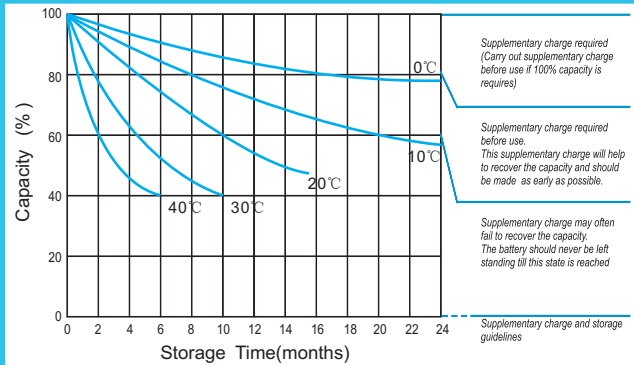
Relationship Between Charging Voltage and Temperature



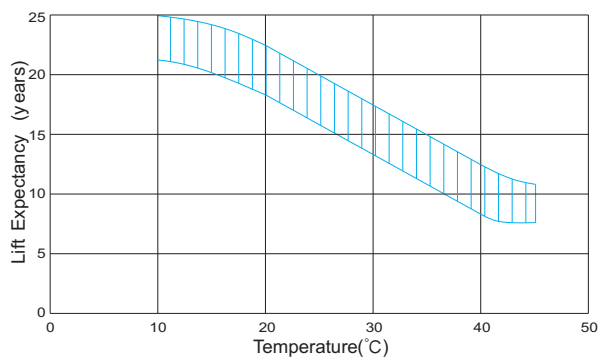
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Life Characteristics Of Standby Use

