OPzV2-350(2V350Ah)

RITAR®

OPzV series is Valve Regulated Lead Acid battery that adopts immobilized GEL and Tubular Plate technology to offer high reliability and performance. The Battery is designed and manufactured according to DIN standards and with die-casting positive grid and patented formula of active material OPzV series exceeds DIN standard values with more than 25 years floating design life at 25℃ and It is the best solution for cyclic use under extreme operating conditions.



ISO 9001 ISO 14001 ISO 45001

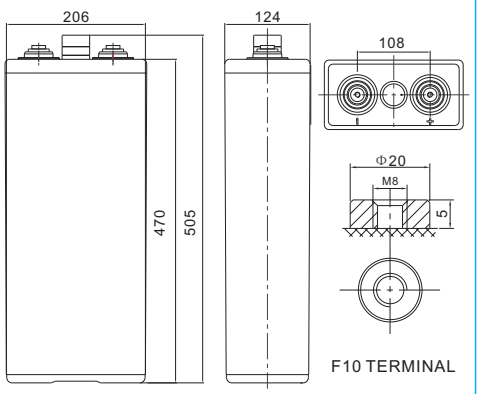
MH 28539 BSTXD2103160008511EC

Specification

Cells Per Unit	1
Voltage Per Unit	2V
Nominal Capacity	350Ah@10hour-rate to 1.80V per cell @25℃
Weight	Approx. 27.0Kg (Tolerance±5%)
Internal Resistance	≤0.80 mΩ (Full Charge Condition @25℃)
Terminal	Default F10(M8)
Max. Discharge Current	1500A (5 sec)
Design Life	25 years
Max. Charging Current	70.0 A
Reference Capacity	C_3 262.5Ah C_5 297.5Ah C_{10} 350.0Ah C_{20} 374.0Ah
Float Charging Voltage	2.23 V~2.25 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	2.37 V~2.40 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -40℃~60℃ Charge: 0℃~50℃ Storage: -40℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 2% at 20℃.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Dimensions

Unit: mm



Length	124±2mm (4.88 inches)
Width	206±2mm (8.11 inches)
Height	470±2mm (18.5 inches)
Total Height	505±2mm (19.9 inches)
Torque Value	14~15 N*m

Constant Current Discharge Characteristics :A(25℃)

F.V/ Time	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR	24HR	48HR	72HR	100HR
1.60V	190.2	123.8	94.2	74.9	63.4	43.8	36.8	19.3	16.5	8.73	6.13	4.59
1.65V	187.2	122.1	93.1	74.1	62.7	43.4	36.4	19.1	16.4	8.65	6.02	4.55
1.70V	182.4	120.1	91.4	72.8	61.6	42.7	36.1	18.9	16.2	8.56	5.96	4.51
1.75V	174.7	117.0	89.6	71.7	60.9	42.4	35.7	18.7	16.1	8.48	5.90	4.46
1.80V	168.0	113.2	87.5	70.0	59.5	41.7	35.0	18.4	15.8	8.31	5.78	4.38
1.85V	150.2	103.2	80.5	64.8	55.3	38.9	32.9	17.3	14.8	7.81	5.44	4.11

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

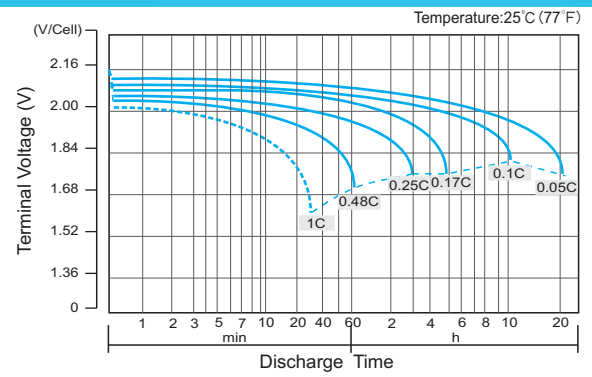
F.V/ Time	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR	24HR	48HR	72HR	100HR
1.60V	331.1	227.7	179.5	143.9	122.3	85.3	71.9	38.1	32.3	17.1	12.0	8.98
1.65V	328.8	225.7	178.2	142.8	121.4	84.8	71.4	37.8	32.1	17.0	11.8	8.92
1.70V	323.5	223.0	175.5	140.8	119.7	83.7	70.9	37.4	31.9	16.8	11.7	8.86
1.75V	312.6	218.4	172.8	139.2	118.8	83.2	70.3	37.1	31.7	16.7	11.6	8.79
1.80V	303.3	212.4	169.4	136.4	116.4	82.1	69.1	36.4	31.1	16.4	11.4	8.64
1.85V	273.6	194.7	156.4	126.7	108.6	76.8	65.2	34.3	29.3	15.5	10.8	8.14

(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.

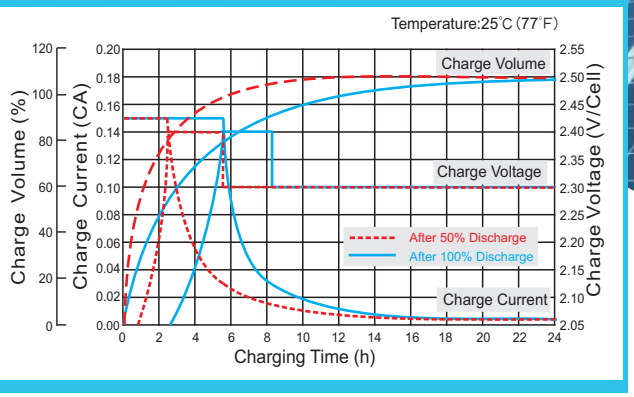
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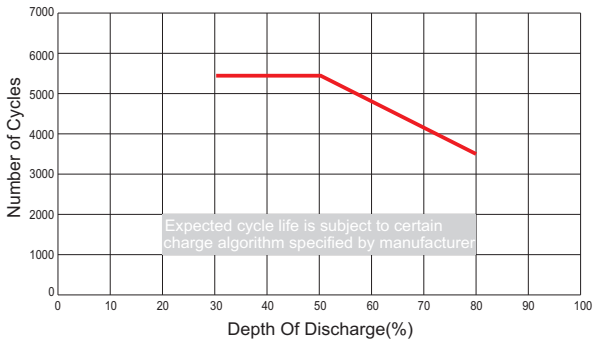
Discharge Characteristics Curve



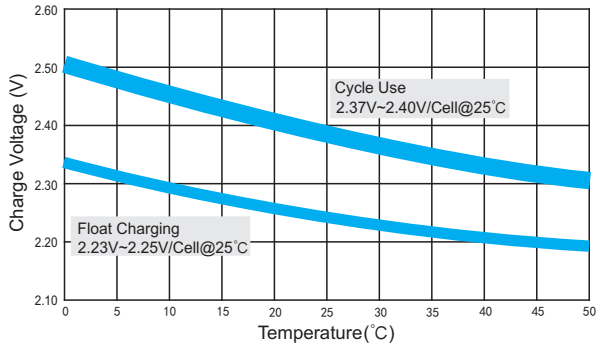
Charge Characteristic Curve for Cycle Use(IUU)



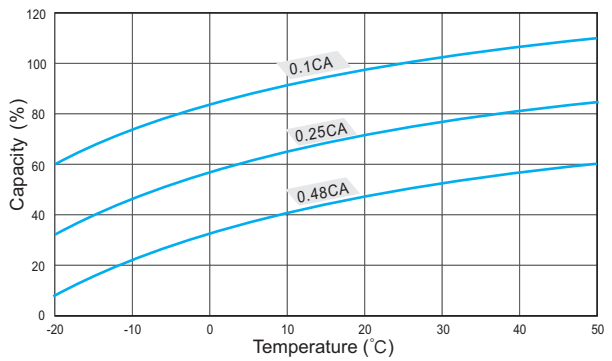
Cycle Life in Relation to Depth of Discharge



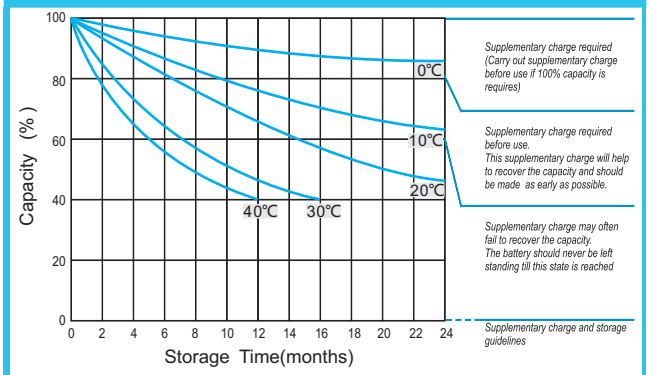
Relationship Between Charging Voltage and Temperature



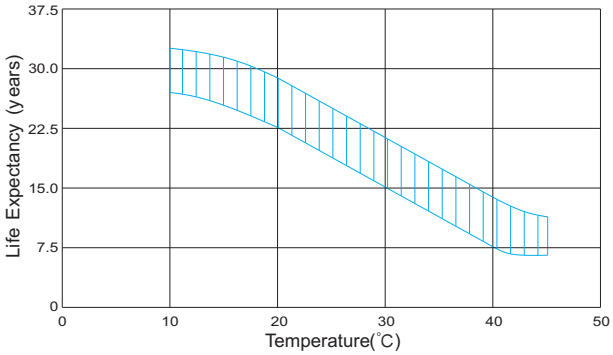
Temperature Effects on Capacity



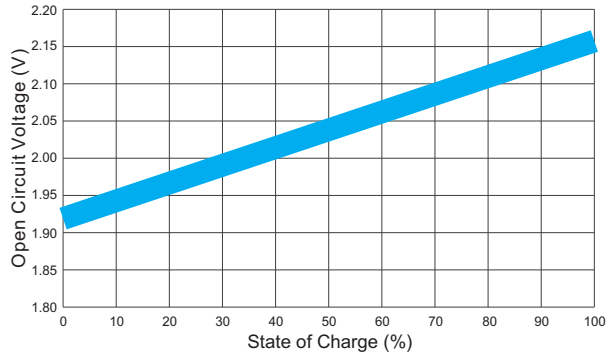
Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20℃)



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

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