OPzV2-2500(2V2500Ah)

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 20 years floating design life at 25 ℃ and It is the best solution for cyclic use under extreme operating conditions.

ISO 9001 ISO 14001 OHSAS 18001

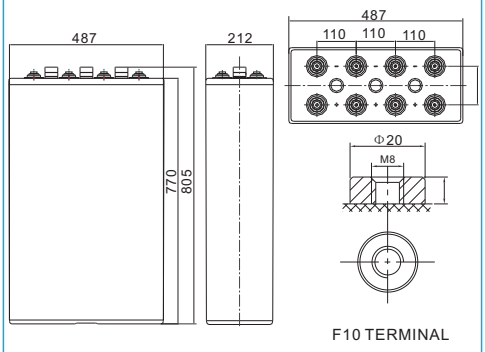
MH 28539 G4M20206-0910-E-16

Specification

Cells Per Unit	1
Voltage Per Unit	2
Nominal Capacity	2500Ah@10hr-rate to 1.80V per cell @25℃
Weight	Approx. 180.5 Kg (Tolerance±3.0%)
Internal Resistance	Approx. 0.40 mΩ
Terminal	F10(M8)
Max. Discharge Current	10000A (5 sec)
Design Life	20 years (floating charge)
Max. Charging Current	500.0 A
Reference Capacity	C3 1920.0AH C5 2169.5AH C10 2500.0AH C20 2670.0AH
Float Charging Voltage	2.25 V~2.30 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: -20℃~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	487±2mm (19.2 inches)
Width	212±2mm (8.35 inches)
Height	770±2mm (30.3 inches)
Total Height	805±2mm (31.7 inches)
Torque Value	10~12 N*m

Constant Current Discharge Characteristics :A(25℃)

F.V/ Time	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	2826	2504	1968	1415	903.0	672.7	451.7	311.9	261.5	137.3
1.65V	2566	2254	1782	1393	888.7	664.8	447.3	309.8	259.4	136.2
1.70V	2389	2135	1714	1358	874.4	652.9	440.3	306.3	257.1	135.0
1.75V	2128	1956	1621	1301	852.8	640.0	433.9	301.9	254.4	133.5
1.80V	1799	1748	1519	1251	824.2	625.8	425.4	296.9	250.0	131.3
1.85V	1463	1444	1305	1116	752.6	575.4	394.7	277.6	234.4	123.0

Constant Power Discharge Characteristics : WPC(25℃)

F.V/ Time	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	4562	4034	3321	2652	1713	1286	875.0	611.7	515.6	270.7
1.65V	4446	4097	3272	2623	1699	1279	867.7	608.8	512.9	269.3
1.70V	4215	3939	3179	2574	1670	1257	860.7	603.2	508.5	267.0
1.75V	3824	3661	3033	2488	1634	1236	846.4	596.7	503.5	264.4
1.80V	3289	3318	2875	2410	1598	1215	832.3	588.0	496.5	260.6
1.85V	2722	2780	2491	2154	1462	1122	775.3	550.1	465.6	244.5

(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.

IEEE/UL Battery Sizing by MooreU
610-952-6067
www.mooreu.com

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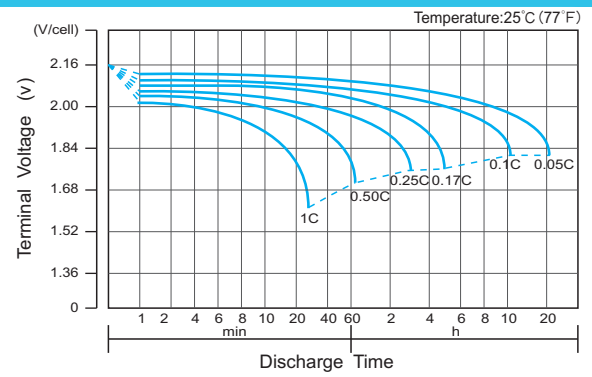
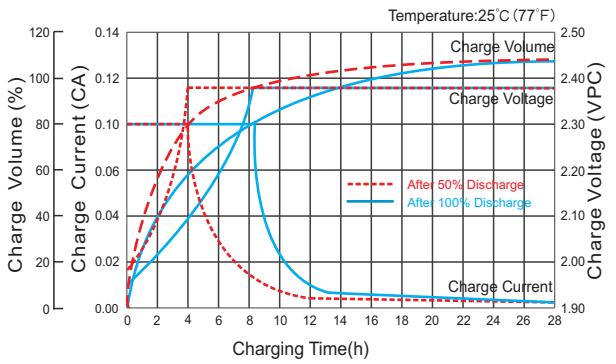
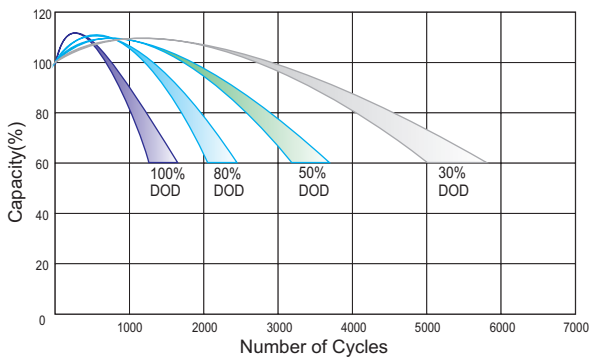
Discharge Characteristics Curve



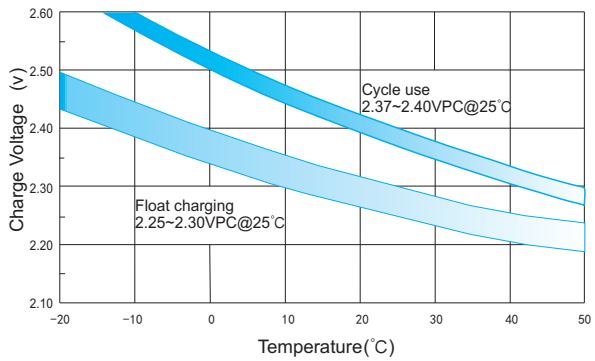
Charge Characteristic Curve for Cycle Use(IU)



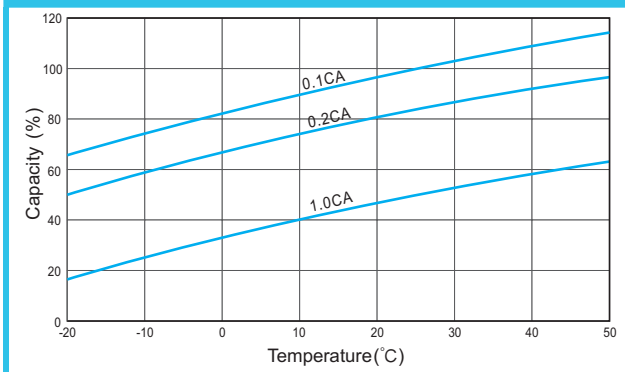
Cycle Life in Relation to Depth of Discharge



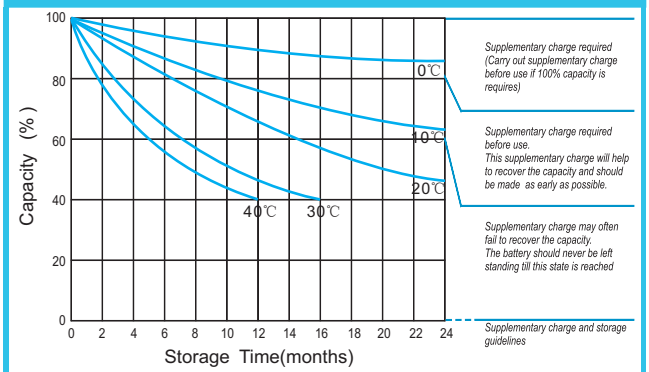
Relationship Between Charging Voltage and Temperature



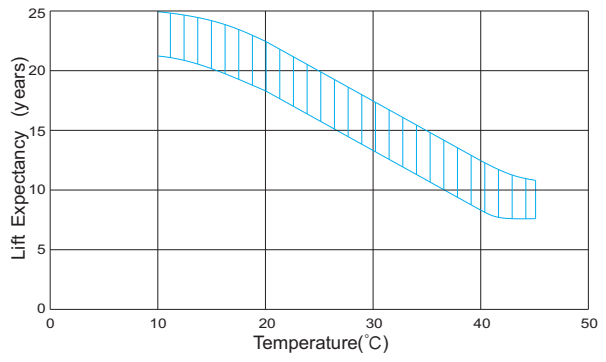
Temperature Effects on Capacity



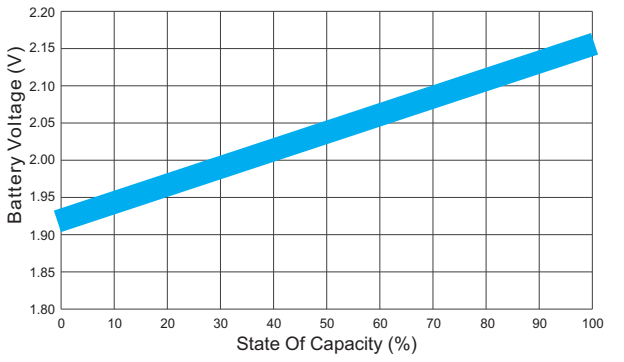
Storage Characteristics



Effect of Temperature on Long Term Life



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.

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

Add: No.1 Huagong Road, Songmu Industrial Park, Shigu District, Hengyang, Hunan, China 421001
Tel: +86-734-8595528 Fax: +86-734-8595518 E-mail: sales@ritarpower.com

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