RA12-105F (12V105Ah)

RA12-105F is a front terminal type battery specially designed for Telecom use with 10+ years design life. The adoption of Centralized venting system makes sure the battery can be installed in any location, and guarantees high security and reliability.

RITAR®

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	105Ah@10hr-rate to 1.75V per cell @25°C
Weight	Approx.32.5Kg
Max. Discharge Current	1050 A (5 sec)
Internal Resistance	Approx. 5 mΩ
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C±5°C
Float charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	31.5 A
Equalization and Cycle Service	14.4 to 14.7 VDC/unit Average at 25°C
Self Discharge	RITAR batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Terminal F8
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.

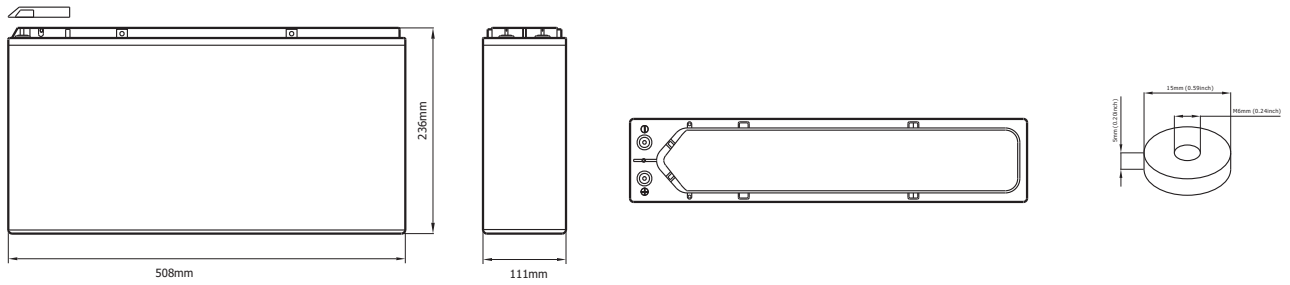
MH28539

G4M20206-0910-E-16

ISO9001:2000 Certificate

Dimensions

Unit: mm Dimension: 508(L)×111(W)×236(H)



Constant Current Discharge Characteristics : A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	366.9	270.1	196.6	120.8	68.25	38.12	27.41	22.68	18.56	13.04	11.03	5.832
10.0V	356.3	257.0	192.5	118.8	67.94	37.84	27.30	22.58	18.45	12.94	10.92	5.726
10.2V	345.7	248.0	189.5	117.7	67.31	37.55	27.09	22.47	18.35	12.83	10.82	5.620
10.5V	310.5	228.8	180.4	114.8	66.68	37.26	26.99	22.26	18.13	12.72	10.71	5.514
10.8V	280.2	208.7	166.3	109.7	65.10	36.60	26.25	21.74	17.80	12.51	10.60	5.408
11.1V	243.9	186.5	149.2	102.8	61.85	34.97	25.10	20.69	17.04	11.98	10.29	5.090

Constant Power Discharge Characteristics : W(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	3848	2873	2115	1295	780.6	438.6	316.3	262.1	214.9	151.3	124.0	65.50
10.0V	3745	2744	2071	1278	776.8	436.9	315.6	261.5	213.6	150.7	122.7	64.86
10.2V	3633	2652	2043	1263	771.1	432.8	313.7	260.2	212.9	149.4	122.1	64.23
10.5V	3271	2451	1948	1235	763.6	428.8	311.9	258.3	211.0	148.2	120.8	63.59
10.8V	2942	2225	1790	1178	744.7	422.5	304.3	251.4	207.7	145.0	119.6	62.96
11.1V	2540	1976	1598	1104	705.6	403.0	289.2	239.4	197.2	139.9	115.7	60.41

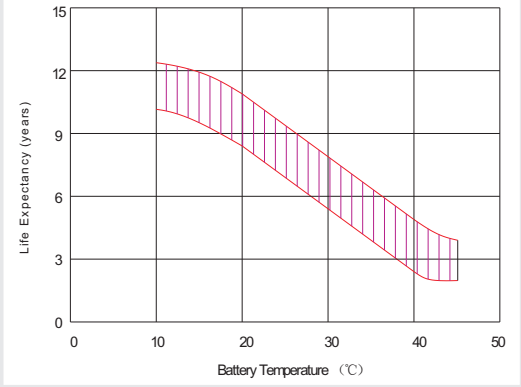
All mentioned values are average values.

RA12-105F

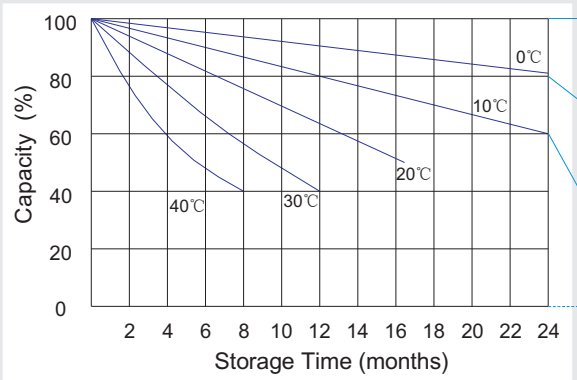
12V105Ah

RITAR®

Effect of temperature on long term float life



Storage characteristic



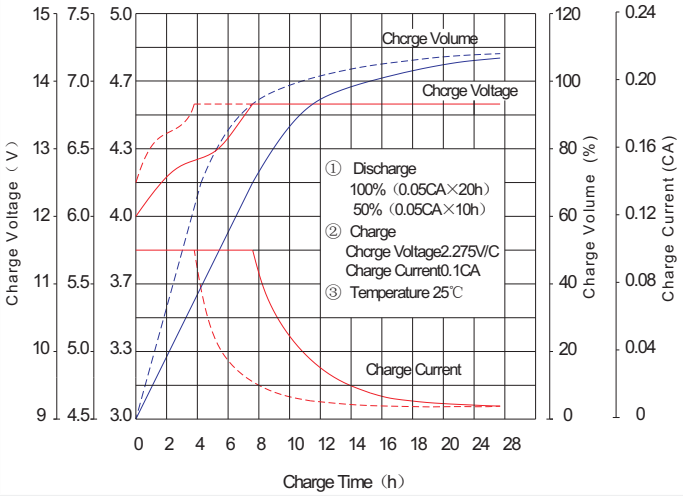
Supplementary charge required (Carry out supplementary charge before use if 100% capacity is requires)

Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made as early as possible.

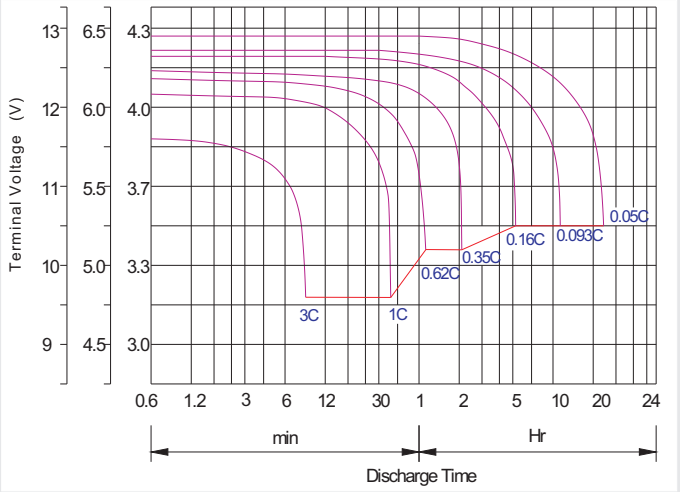
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached

Supplementary charge and storage guidelines

Charge characteristic Curve for standby use



Discharge characteristic Curve



Capacity Factors With Different Temperature

Battery Type		-20℃	-10℃	0℃	5℃	10℃	20℃	25℃	30℃	40℃	45℃
GEL Battery	2V	50%	70%	74%	80%	88%	98%	100%	102%	104%	105%
	6V&12V	60%	75%	80%	85%	90%	98%	100%	103%	105%	106%
AGM Battery	2V	46%	66%	70%	80%	90%	99%	100%	103%	107%	109%
	6V&12V	55%	70%	76%	85%	92%	99%	100%	104%	108%	110%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤0.2C	0.2C< (A) <1.0C	(A) ≥1.0C

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	-0.2Cx2h+2.4~2.45V/Cellx24h,Max. Current 0.3CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h

Maintenance & Cautions

Float Service:

※ Every month, recommend inspection every battery voltage.

※ Every three months, recommend equalization charge for one time.

Equalization charge method:

Discharge: 100% rate capacity discharge.

Charge: Max. current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h.

※ Effect of temperature on float charge voltage: -3mV/℃/Cell.

※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.

SHENZHEN RITAR POWER CO.,LTD.

URL:www.ritarpower.com

Address: Rm405,Tower C, Huahan Building,Langshan Rd16, Nanshan District, ShenZhen, 518057, China

Tel:+86-755-33981668 Fax:86-755-8347-5180

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