



# RA12-150F (12V150Ah)

RA12-150F 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.



## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	150Ah@10hr-rate to 1.75V per cell @25°C
Weight	Approx.45.0Kg
Max. Discharge Current	1500 A (5 sec)
Internal Resistance	Approx. 4 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	45 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 F9
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.



MH28539



G4M20206-0910-E-16

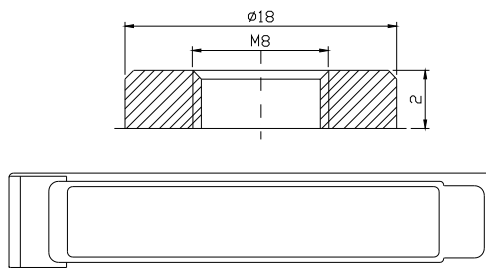
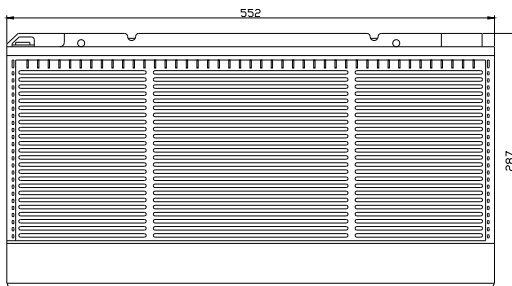


ISO9001:2000 Certificate

## Dimensions

Unit: mm Dimension: 555(L)×110(W)×288(H)

Terminal F9



## Constant Current Discharge Characteristics : A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	524.2	385.9	280.8	172.5	97.50	54.46	39.15	32.40	26.52	18.63	15.75	8.332
10.0V	509.0	367.2	275.0	169.7	97.05	54.05	39.00	32.25	26.36	18.48	15.60	8.180
10.2V	493.9	354.2	270.7	168.2	96.15	53.64	38.70	32.10	26.21	18.33	15.45	8.029
10.5V	443.5	326.9	257.8	164.0	95.25	53.24	38.55	31.80	25.90	18.18	15.30	7.877
10.8V	400.3	298.1	237.6	156.8	93.00	52.28	37.50	31.05	25.43	17.88	15.15	7.726
11.1V	348.5	266.4	213.1	146.9	88.35	49.96	35.85	29.55	24.34	17.12	14.69	7.271

## Constant Power Discharge Characteristics : W(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	5497	4104	3022	1849	1115	626.5	451.8	374.4	307.0	216.2	177.1	93.57
10.0V	5350	3920	2959	1826	1110	624.1	450.9	373.5	305.1	215.3	175.3	92.66
10.2V	5189	3789	2919	1805	1102	618.3	448.2	371.7	304.2	213.5	174.4	91.75
10.5V	4673	3501	2783	1764	1091	612.6	445.5	369.0	301.4	211.7	172.6	90.85
10.8V	4203	3179	2557	1683	1064	603.6	434.7	359.1	296.7	207.1	170.8	89.94
11.1V	3628	2823	2283	1577	1008	575.8	413.1	342.0	281.7	199.9	165.3	86.30

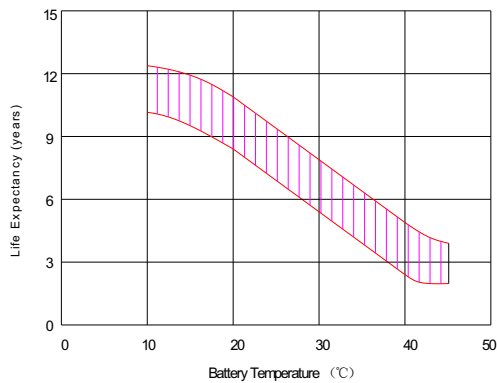
All mentioned values are average values.

# RA12-150F

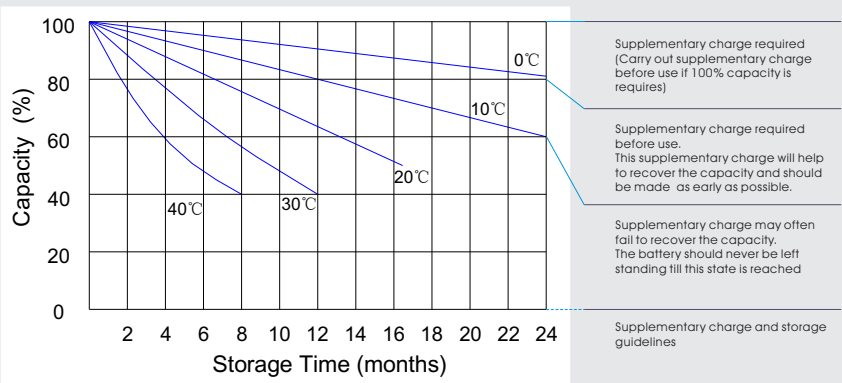
12V150Ah



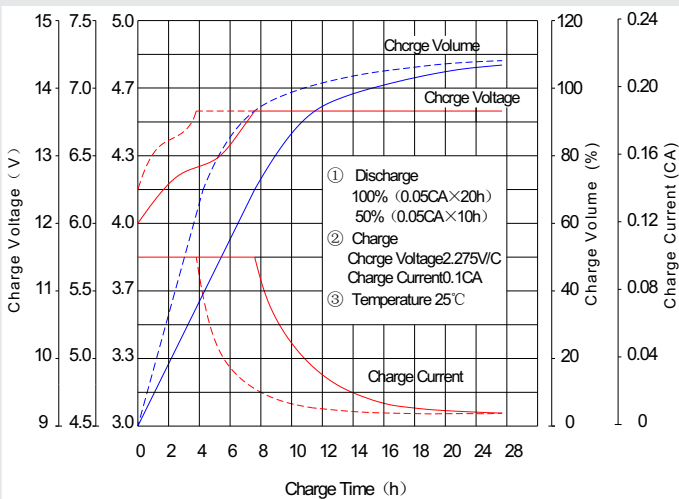
## Effect of temperature on long term float life



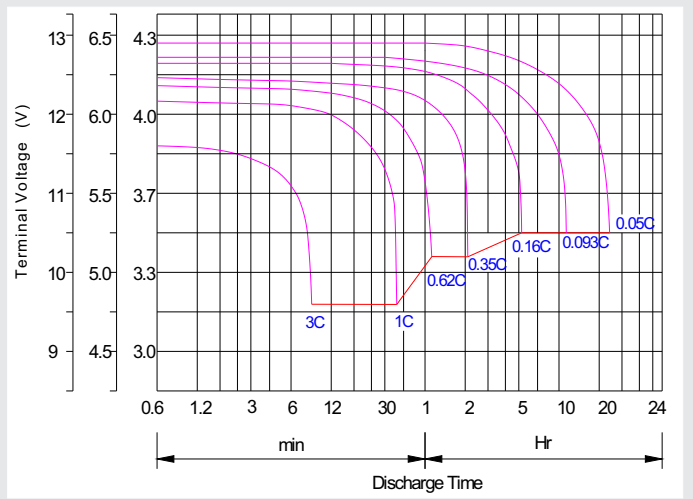
## Storage characteristic



## Charge characteristic Curve for standby use



## Discharge characteristic Curve



## Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
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

<b>Float Service:</b>
※ 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/°C/Cell.
※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.