



RA12-55F (12V55Ah)

RA12-55F 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	55Ah@10hr-rate to 1.75V per cell @25°C
Weight	Approx. 18Kg
Max. Discharge Current	550 A (5 sec)
Internal Resistance	Approx. 6 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	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	16.5 A
Equalization and Cycle Service	14.6 to 14.8 VDC/unit Average at 25°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) 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 F11
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.



MH28539



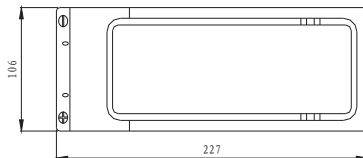
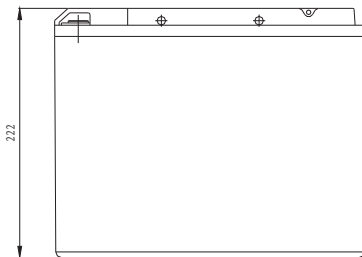
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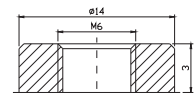
ISO9001:2000 Certificate

Dimensions

Unit: mm Dimension: 227(L)×106(W)×222(H)



Terminal F11



Constant Current Discharge Characteristics : A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	169.6	127.4	99.83	60.50	35.75	20.77	14.79	12.12	9.918	6.832	5.777	3.055
10.0V	164.7	121.2	97.79	59.46	35.59	20.61	14.73	12.06	9.860	6.776	5.721	2.999
10.2V	159.8	116.9	95.72	58.36	35.26	20.46	14.62	12.01	9.802	6.721	5.666	2.944
10.5V	143.5	107.9	91.13	57.92	34.93	20.30	14.56	11.89	9.685	6.665	5.610	2.888
10.8V	129.5	98.4	84.01	56.93	34.10	19.94	14.16	11.61	9.510	6.554	5.554	2.833
11.1V	111.1	87.91	75.35	52.75	32.40	19.05	13.54	11.05	9.102	6.277	5.388	2.666

Constant Power Discharge Characteristics : W(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	1789	1356	1084	674.0	413.1	244.8	175.9	144.4	118.3	81.57	69.03	36.63
10.0V	1754	1315	1069.0	665.6	412.1	243.5	176.0	144.3	118.0	81.18	68.60	35.99
10.2V	1722	1280	1056.9	660.8	408.9	242.0	175.2	143.9	117.6	80.65	67.99	35.33
10.5V	1568	1192	1009.6	656.2	405.3	240.3	174.6	142.6	116.2	79.98	67.32	34.66
10.8V	1432	1093	942.2	648.8	397.8	237.2	169.8	139.4	114.1	78.65	66.65	33.99
11.1V	1243	991.8	858.0	607.3	380.8	228.4	162.5	132.6	109.23	75.32	64.65	31.99

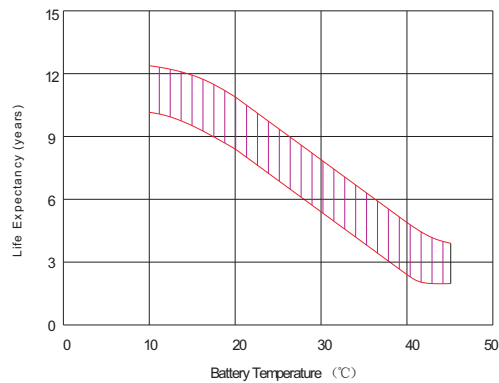
All mentioned values are average values.

RA12-55F

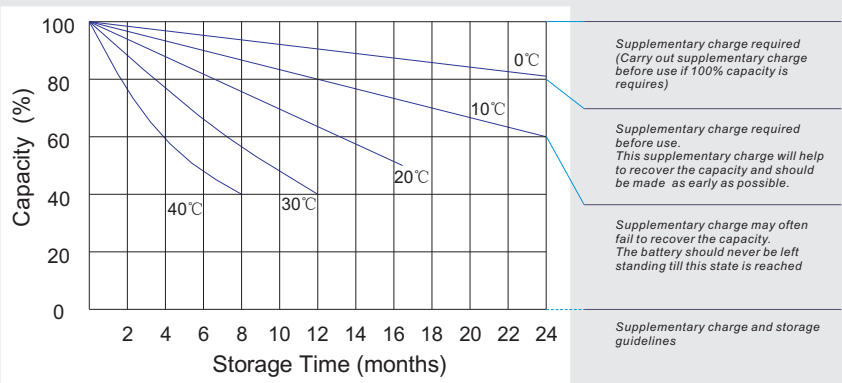
12V55Ah



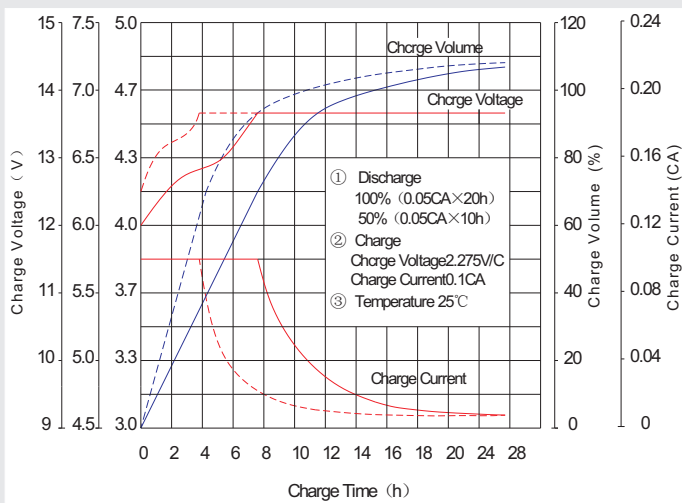
Effect of temperature on long term float life



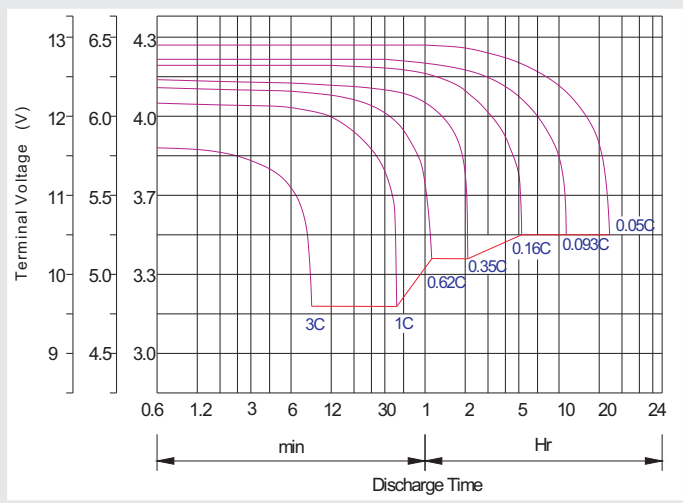
Storage characteristic



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	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	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

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

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