



# RA12-155SH (12V155Ah) (590.8w/cell)

RA12-155SH is high rate series with 10 years floating design life, especially designed for high rate load discharge applications. By using strong grid and specific paste plate to insure high performance during big current discharge requirement when electricity is off., High Rate series offering extra-durable stable performance under high rate discharge.



## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	590.8W@15min-rate to 1.67V per cell @25°C
Weight	Approx. 47.0 Kg
Max. Discharge Current	1550A (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	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	46.5 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	Faston tabF5/F12
Constainer Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V2 can be available upon request.



MH28539



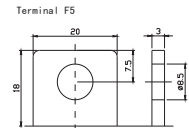
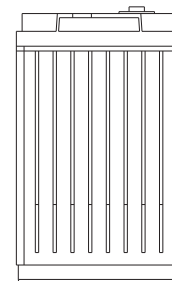
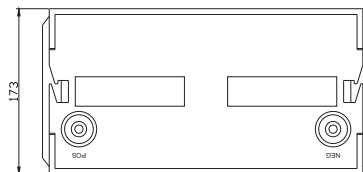
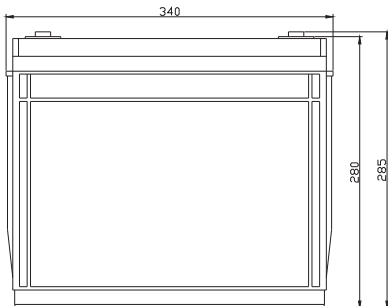
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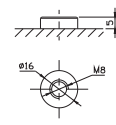
ISO9001:2000 Certificate

## Dimensions

Unit: mm Dimension: 340(L)×173(W)×280(H)



Terminal F12



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

F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
9.60V	471.9	416.3	370.5	332.3	255.3	180.6	101.1	80.6
10.0V	440.6	394.4	349.0	319.5	240.5	173.9	99.2	77.9
10.2V	427.1	384.9	337.5	310.3	234.0	171.0	97.5	76.5
10.5V	413.0	370.5	322.2	299.5	222.8	164.7	95.2	75.0
10.8V	394.9	355.9	302.5	290.1	215.7	157.8	92.9	73.7
11.1V	369.1	327.7	284.5	274.4	208.0	152.6	90.1	70.8

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

F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
9.60V	4979	4464	3980	3651	2819	2015	1131	902
10.0V	4693	4286	3808	3545	2682	1959	1106	876
10.2V	4582	4171	3708	3479	2630	1930	1098	867
10.5V	4474	4078	3573	3375	2535	1884	1092	862
10.8V	4324	3915	3409	3283	2457	1821	1074	855
11.1V	4165	3708	3253	3166	2402	1767	1054	830

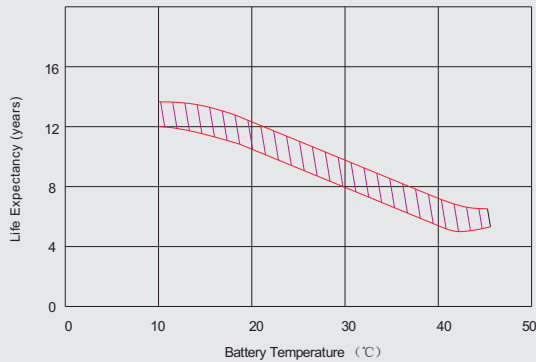
All mentioned values are average values.

# RA12-155SH

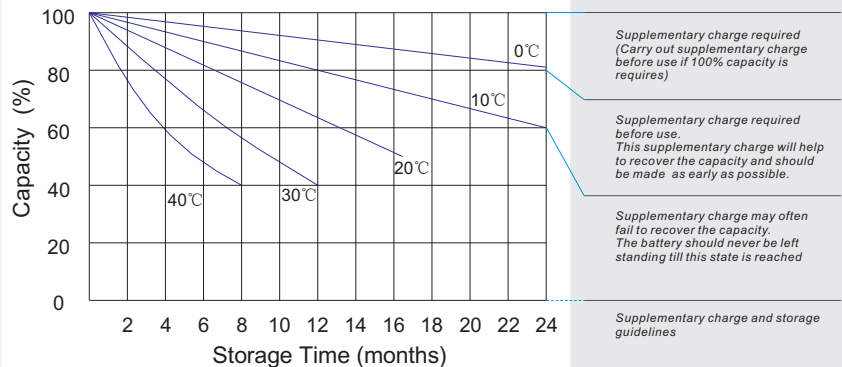
12V155Ah



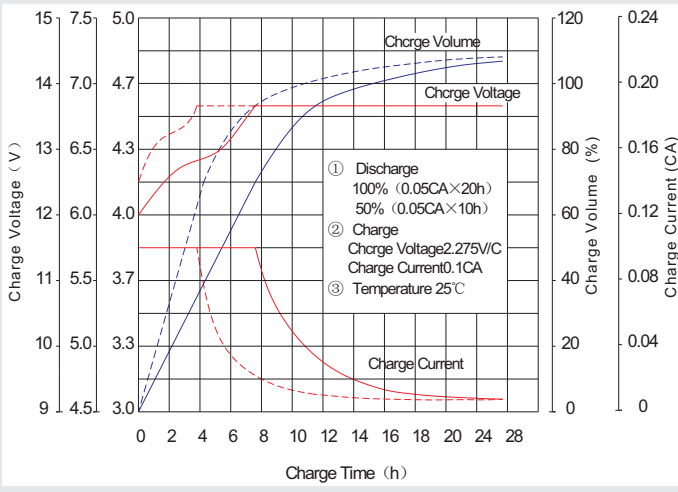
## Effect of temperature on long term float life



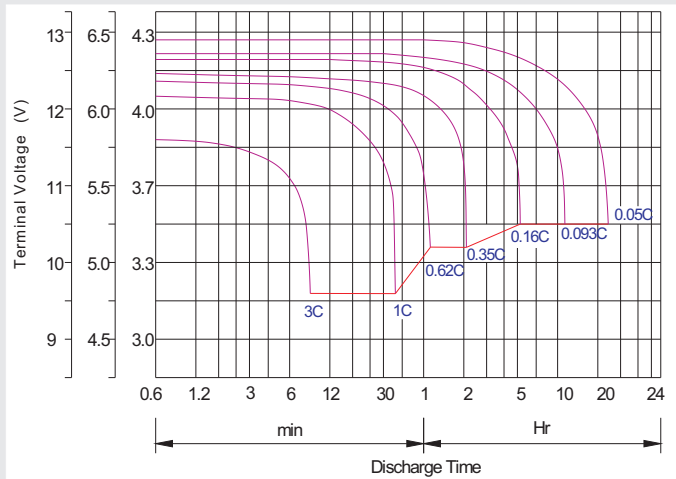
## Storage characteristic



## 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

<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.

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

Charging Method:

Constant Voltage	-0.2Cx2h + 2.4~2.5V/Cellx24h, Max. Current 0.3CA
Constant Current	-0.2Cx2h + 0.1CAx12h
Fast	-0.2Cx2h + 0.3CAx4.0h