

RA12-150D(12V150Ah)

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	150Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 43.0 Kg (Tolerance ± 1.5%)
Internal Resistance	Approx. 4 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1450A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	43.5 A
Reference Capacity	C3 113.4AH C5 127.5AH C10 145.0AH C20 152.6AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
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
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

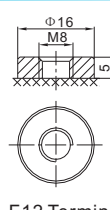
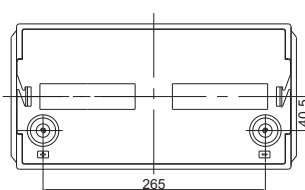
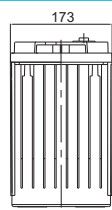
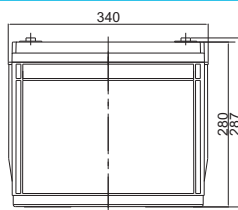


MASTER SOLAR

RA-D (Deep Cycle) series batteries provide superior high integrity and reliability. It is specially designed for frequent cyclic charge and discharge. By using strong grids, thick plate and specially active material are designed for repeated deep-discharge applications. The DC series batteries offers 30% more cyclic life than the standby series. It is suitable for solar and wind renewable energy storage, mobility and medical equipment, RV, telecom, broadband and cable TV, UPS systems etc.



Dimensions



F 12 Terminal

Length	340±1mm (13.4 inches)
Width	173±1mm (6.81 inches)
Height	280±1mm (11.0 inches)
Total Height	287±1mm (11.3 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

Constant Current Discharge Characteristics : A(25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	326.8	251.9	147.6	87.8	53.6	40.4	31.9	26.9	18.4	15.6	7.93
1.65V	315.9	244.3	144.5	86.1	52.7	39.8	31.5	26.6	18.2	15.4	7.86
1.70V	301.7	234.4	140.4	83.9	51.5	38.9	30.9	26.1	17.9	15.2	7.76
1.75V	282.7	221.1	134.8	80.9	49.9	37.8	30.1	25.5	17.5	14.9	7.63
1.80V	257.3	203.2	127.1	76.8	47.6	36.3	29.0	24.7	17.0	14.5	7.44
1.85V	222.5	178.5	116.3	70.9	44.3	34.0	27.4	23.4	16.2	13.9	7.17

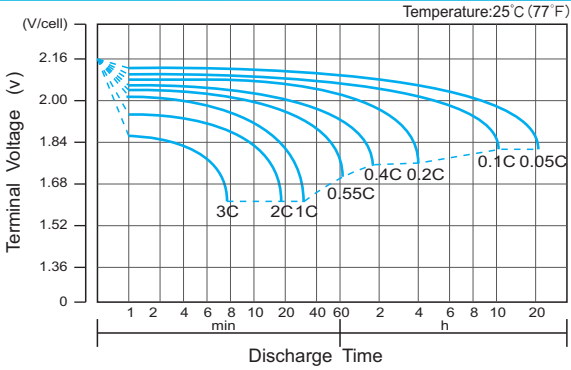
Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	556	440	268	164	102	77.1	61.3	51.9	35.9	30.6	15.6
1.65V	551	436	266	163	101	76.4	60.8	51.5	35.6	30.3	15.5
1.70V	532	422	260	159	98.6	75.0	59.8	50.7	35.1	30.0	15.3
1.75V	508	404	252	154	95.9	73.2	58.5	49.7	34.4	29.4	15.1
1.80V	470	376	241	147	92.0	70.4	56.5	48.2	33.5	28.7	14.7
1.85V	414	335	222	137	86.1	66.3	53.5	46.0	32.0	27.5	14.2

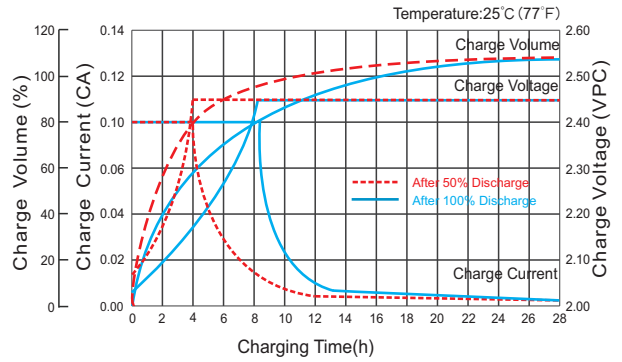
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

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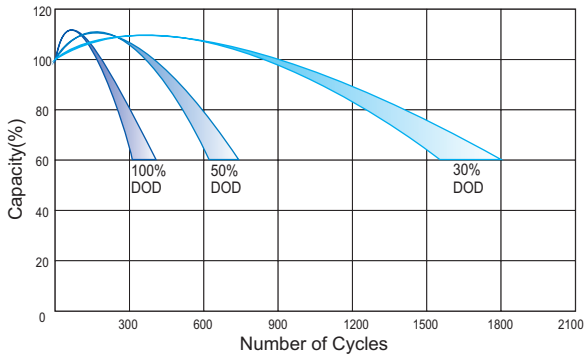
Discharge Characteristics Curve



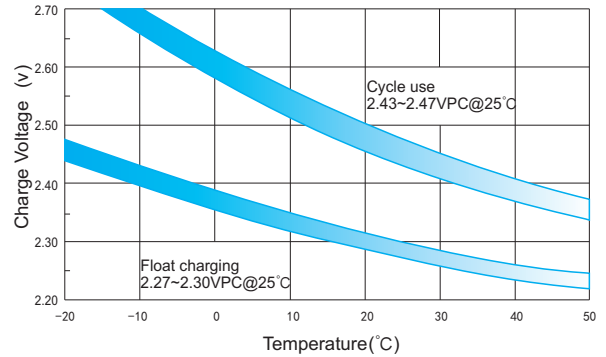
Charge Characteristic Curve for Cycle Use(IU)



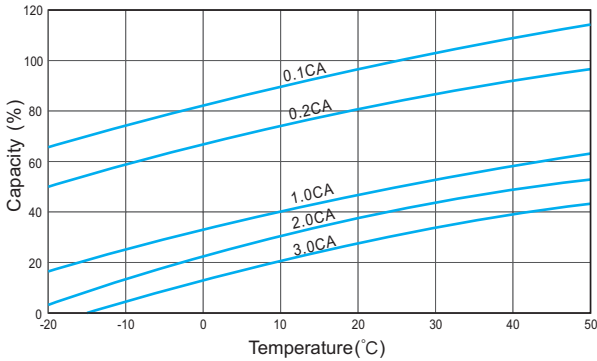
Cycle Life in Relation to Depth of Discharge



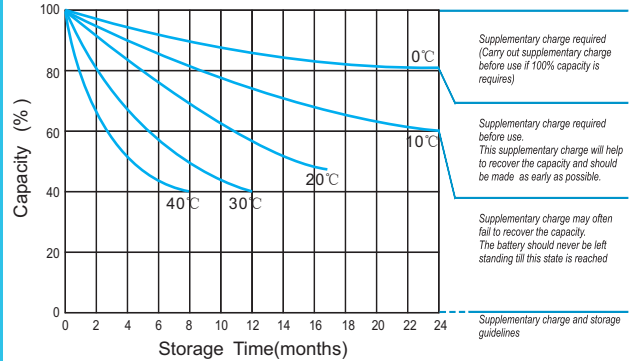
Relationship Between Charging Voltage and Temperature



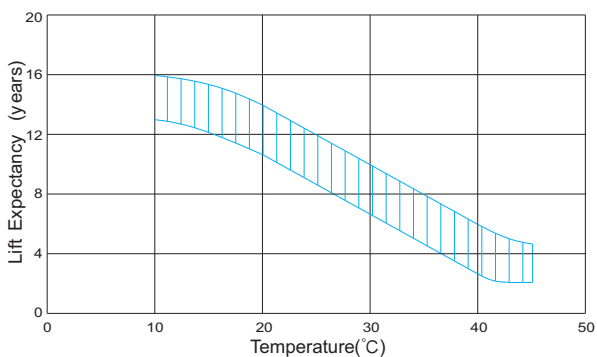
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20°C)

