

RDA Solutions batteries use high purity raw materials and low density electrolytes to produce superior cycle performance and low self-discharge rate. Our batteries are specifically designed to withstand harsh environments.

► Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	100Ah @ 10hr-rate to 1.8V per cell @25°C (77°F)
Weight	Approx. 26 kg(57.2 lbs)
Maximum Discharge Current	1000A(5sec)
Internal Resistance	Approx. 7 mΩ
Operating Temperature Range	Discharge: -15°C~50°C(5°F~122°F) Charge: -15°C~40°C(5°F~104°F) Storage: -15°C~40°C(5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C (77°F±5°F)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	27A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C (77°F)
Self Discharge	RDA Solutions batteries can be stored for more than 6 months at 25°C(77°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	Thread lead alloy recessed terminal to accept M8 bolt
Container Material	ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.



IT1720HL22031803

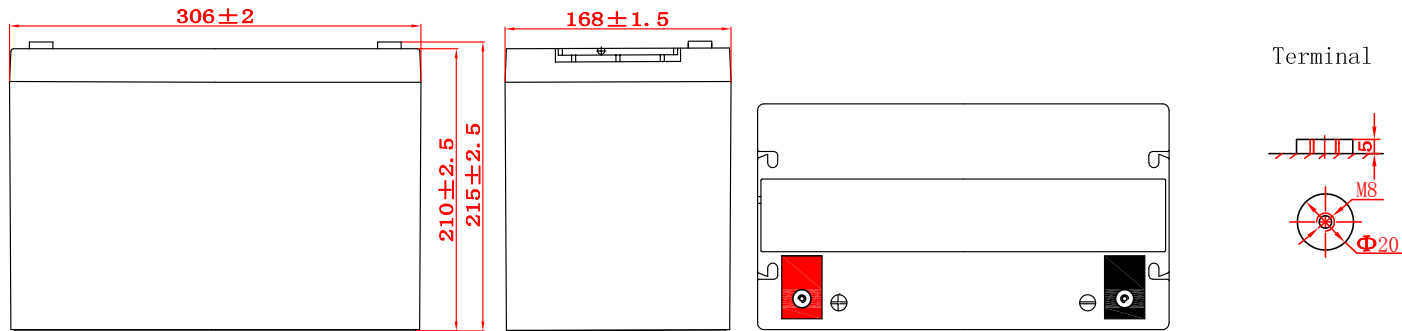
VRLA batteries are certified by ISO 9001, ISO14001 and OHSAS18001.

► Dimensions :

Unit: mm	Overall Height (H)	Container height (h)	Length (L)	Width (W)
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215±2.5	210±2.5	306±2	168±1.5
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unit:mm



Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	95.0	69.9	57.2	24.7	16.6	11.2	9.23	4.92
1.67	93.3	68.6	54.5	24.0	16.2	11.1	9.21	4.91
1.7	92.0	67.9	53.8	23.8	16.1	11.1	9.20	4.89
1.75	88.8	66.0	52.1	23.4	15.9	11.0	9.15	4.85
1.8	84.7	63.2	51.0	22.5	15.5	10.8	9.00	4.78
1.85	79.2	58.7	47.0	20.9	14.4	10.3	8.65	4.62

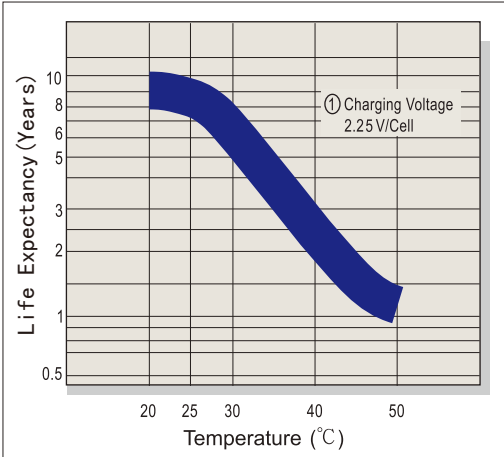
Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	172.4	129.2	106.6	47.1	32.1	21.8	18.06	9.69
1.67V	167.7	125.7	101.6	45.7	31.4	21.7	18.02	9.64
1.7V	162.7	123.0	100.7	45.3	31.3	21.6	17.97	9.61
1.75V	153.7	119.1	98.2	44.5	30.9	21.4	17.82	9.52
1.8V	142.3	116.6	96.8	42.9	30.1	21.0	17.54	9.40
1.85V	127.2	106.0	88.6	40.1	28.3	20.3	17.01	9.13

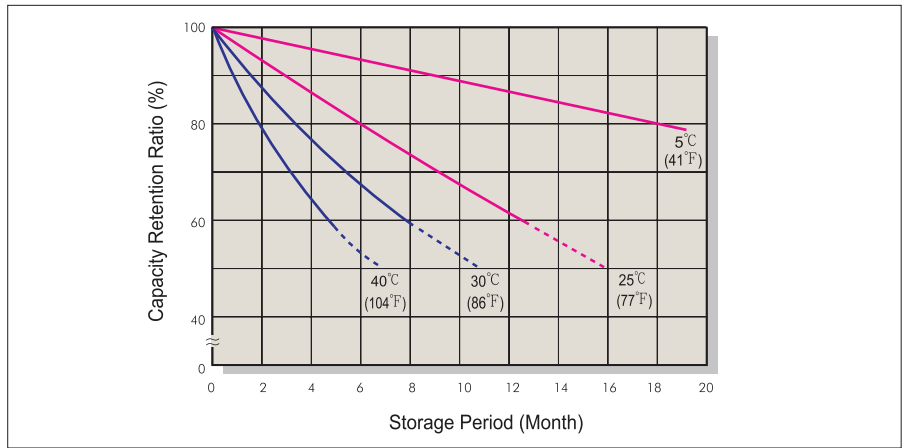


RDA 100Ah 12V

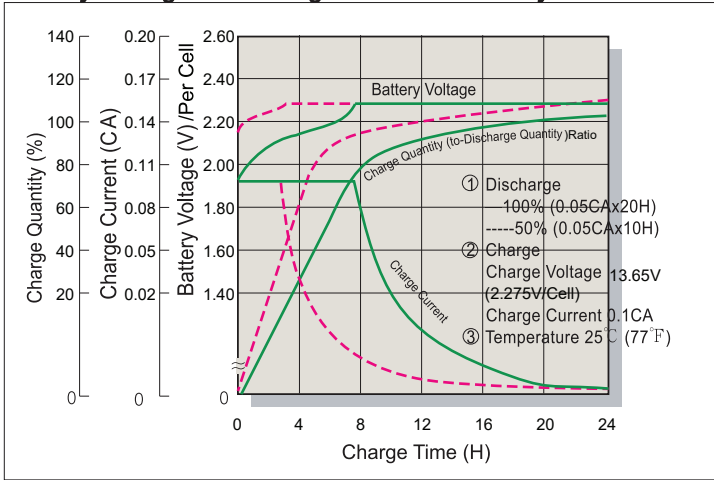
Trickle(or Float)Design Life



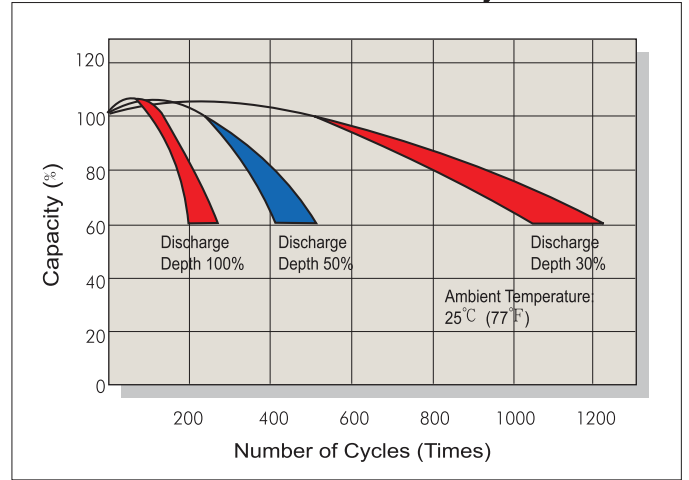
Capacity Retention Characteristic



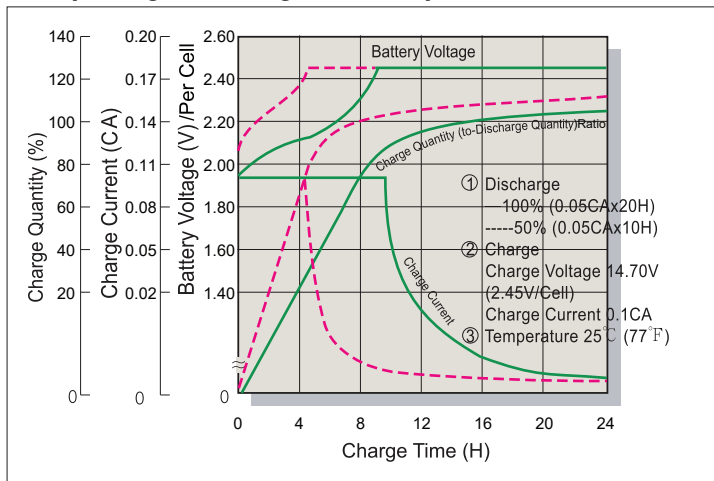
Battery Voltage and Charge Time for Standby Use



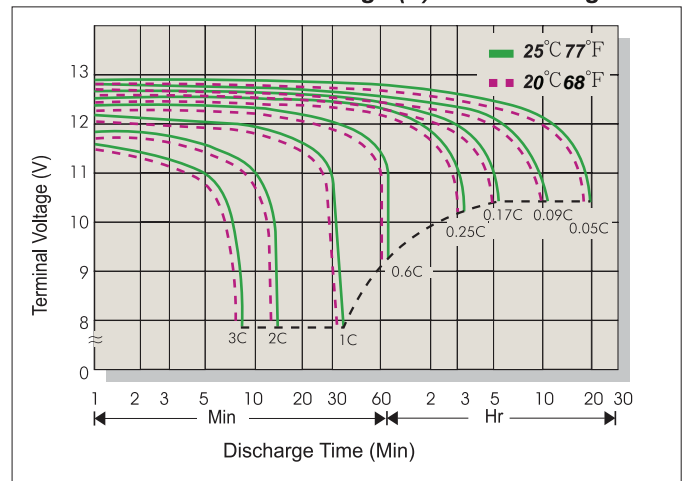
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.45	2.40~2.50	0.3C
Standby	25°C (77°F)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.65	1.60
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Effect of temperature on capacity (20HR)

Temperature	Dependency of Capacity (20HR)
40 °C	102%
25 °C	100%
0 °C	85%
-15 °C	65%

Self-discharge Characteristics

Storage time	Preservation rate
3 Months	91%
6 Months	82%
12 Months	64%

