



EV series is specially designed for frequent discharge deep cycle, the series battery offers reliable performance in high load situations and could provide competitive cycle performance. Suitable for Electric Vehicle and Golf cart; Industrial equipment, Floor machines, Marine, RV, and no- idle solutions.

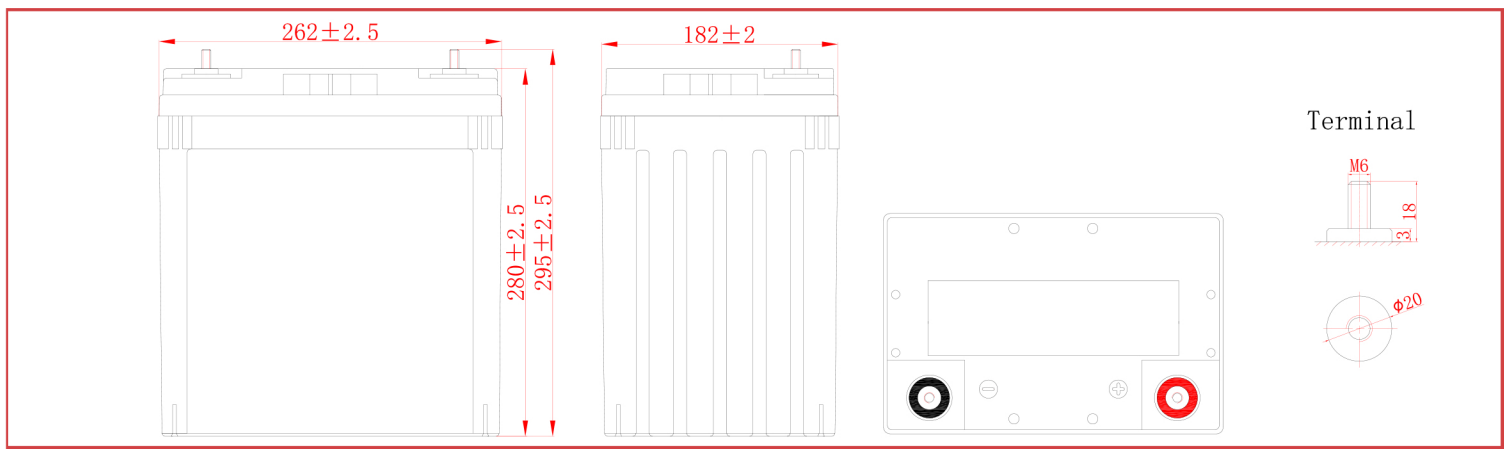
Specification

Cells Per Unit	4
Voltage Per Unit	8
Capacity	150Ah @ 3hr-rate to 1.68V per cell @25°C (77°F)
Weight	Approx. 37.5 kg(82.5 lbs) - Tolerance±3%
Maximum Discharge Current	1500A (5sec)
Internal Resistance	Approx. 2.8mΩ
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	9.0 to 9.2 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	45A
Equalization and Cycle Service	9.6 to 10.0 VDC/unit Average at 25°C (77°F)
Self Discharge	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	bolt Terminal to accept M6 nut
Container Material	ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.



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

Dimensions :	Overall Height (H)	Container height (h)	Length (L)	Width (W)
Unit: mm	295±2.5	280±2.5	262±2.5	182±2



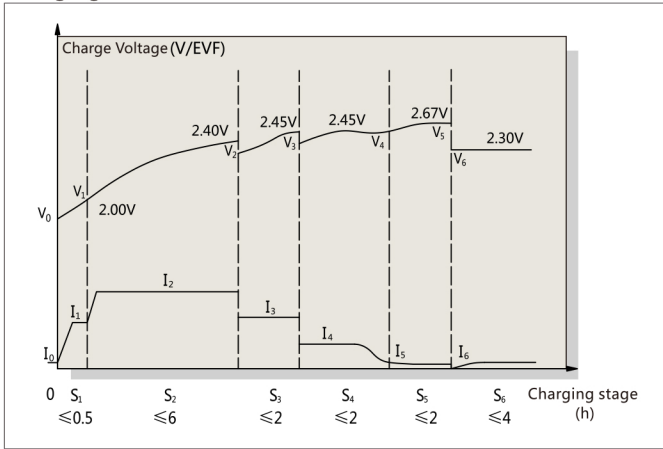
Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

F.V/Time	30min	45min	1h	2h	3h	5h	8h	10h
1.60V	178.6	131.4	103.6	62.0	50.9	32.5	20.47	16.64
1.68V	175.4	129.0	102.1	61.7	50.2	32.3	20.42	16.62
1.7V	173.0	127.6	100.9	61.5	49.6	32.1	20.37	16.59
1.75V	167.0	124.1	97.7	60.1	47.7	31.7	20.19	16.50
1.8V	159.2	119.7	93.5	58.0	45.7	30.8	19.83	16.24
1.85V	149.0	113.7	86.7	54.2	42.9	28.6	18.92	15.60

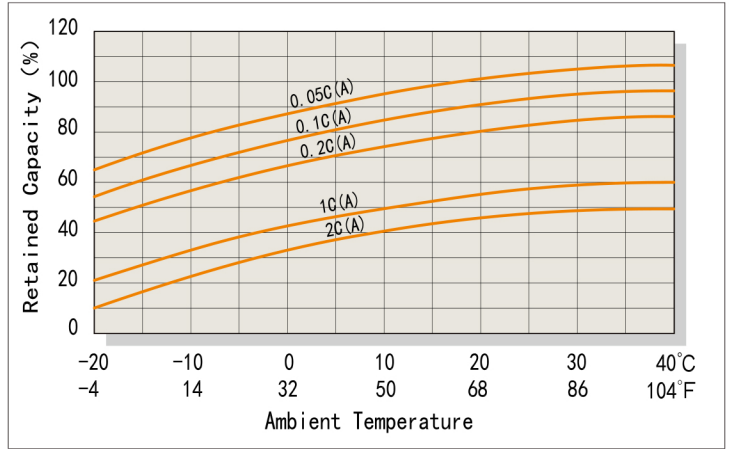
Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

F.V/Time	30min	45min	1h	2h	3h	5h	8h	10h
1.60V	295.0	220.2	176.2	107.5	95.4	63.5	39.21	32.76
1.68V	287.1	214.2	173.9	106.7	94.0	63.3	39.03	32.69
1.7V	278.5	209.7	172.4	106.4	92.8	63.1	38.93	32.61
1.75V	263.0	199.2	168.2	104.3	89.3	62.3	38.62	32.33
1.8V	243.5	185.9	163.8	102.1	85.6	60.6	37.93	31.83
1.85V	217.7	167.5	154.3	98.9	81.2	56.9	36.63	30.86

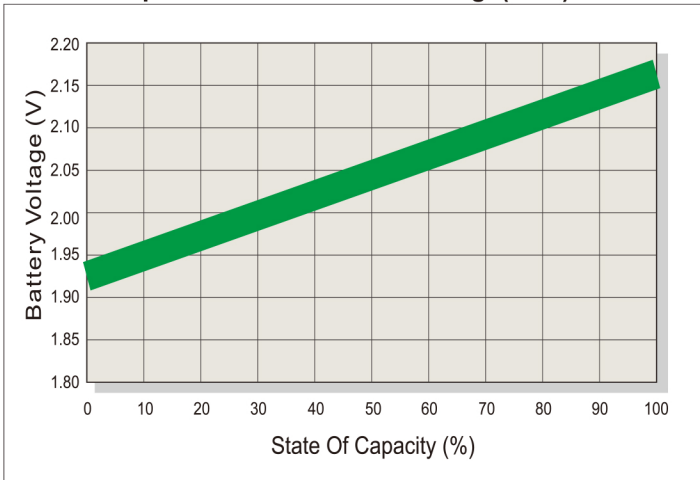
Charging characteristic curve



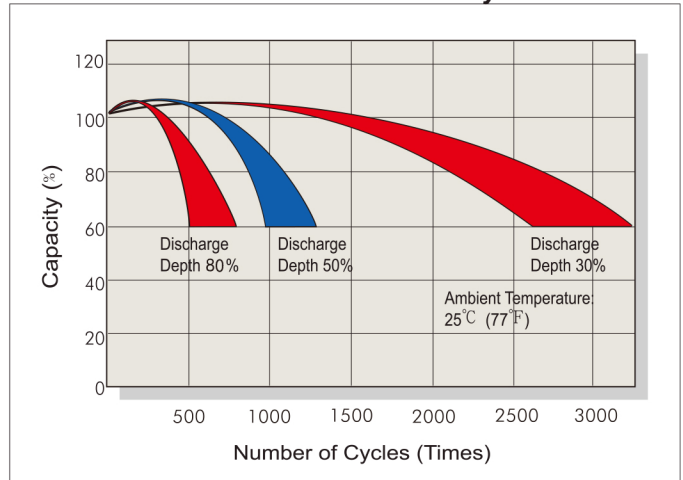
Temperature Effects on Capacity



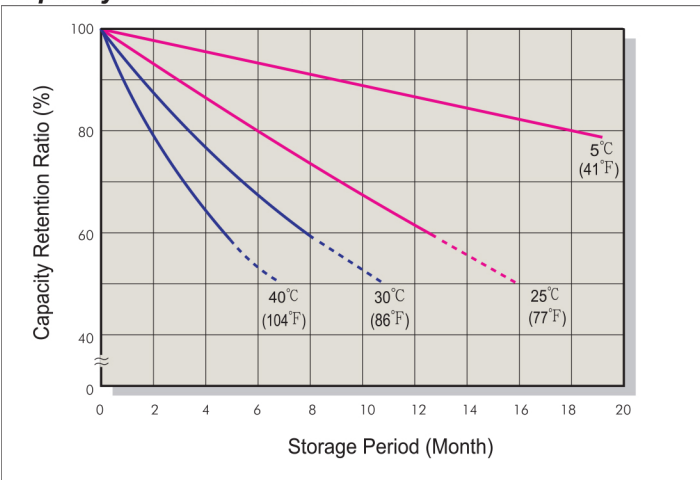
Relationship of OCV And State of Charge(20°C)



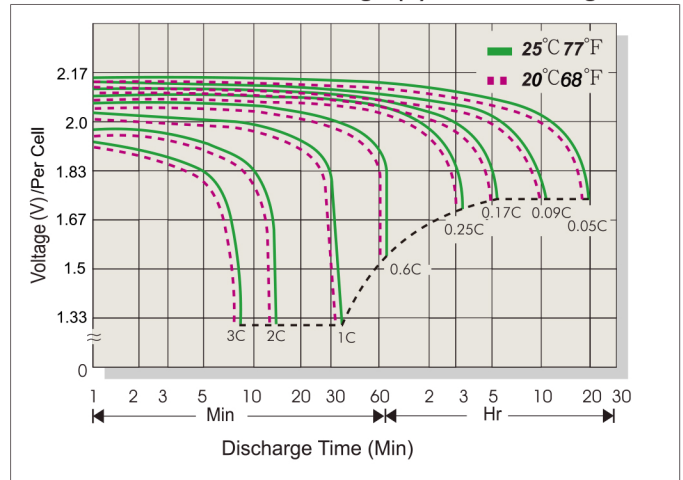
Cycle Service Life



Capacity Retention Characteristic



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%