



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.

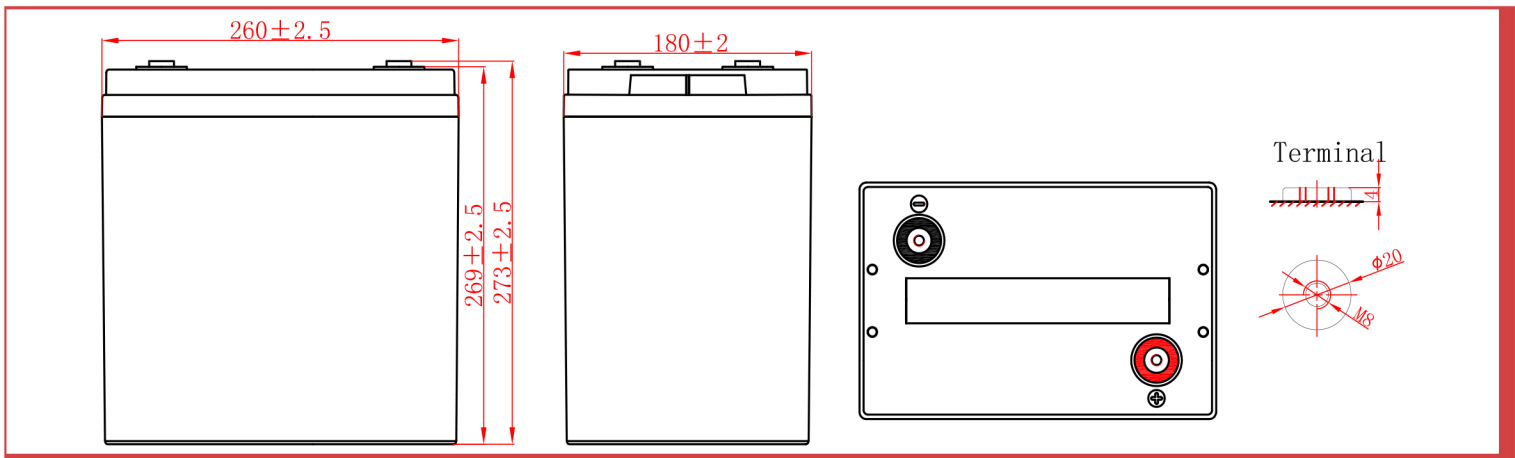
► Specification

Cells Per Unit	3
Voltage Per Unit	6
Capacity	200Ah @ 3hr-rate to 1.68V per cell @25°C (77°F)
Weight	Approx. 35.5 kg(78.1 lbs) - Tolerance±1.5%
Maximum Discharge Current	2000A (5sec)
Internal Resistance	Approx. 1.7mΩ
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	6.75 to 6.9 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	60A
Equalization and Cycle Service	7.2 to 7.5 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	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.



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

Dimensions :	Overall Height (H)	Container height (h)	Length (L)	Width (W)
Unit: mm	273±2.5	269±2.5	260±2.5	180±2



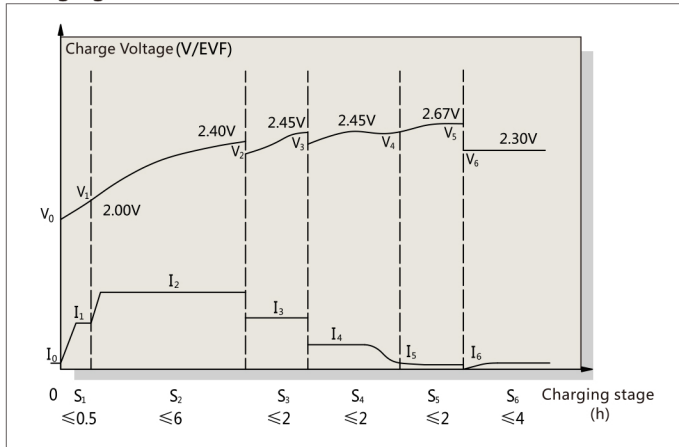
Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

F.V/Time	30min	45min	1h	2h	3h	5h	8h	10h
1.60V	228	168	138	82.6	67.5	43.3	27.3	22.19
1.67V	224	165	136	82.2	66.7	43.1	27.2	22.15
1.7V	221	163	134	82.0	65.8	42.8	27.2	22.12
1.75V	213	159	130	80.1	63.3	42.1	26.9	22.00
1.8V	204	153	125	77.3	60.7	41.0	26.4	21.65
1.85V	190	145	116	72.2	56.9	38.1	25.2	20.80

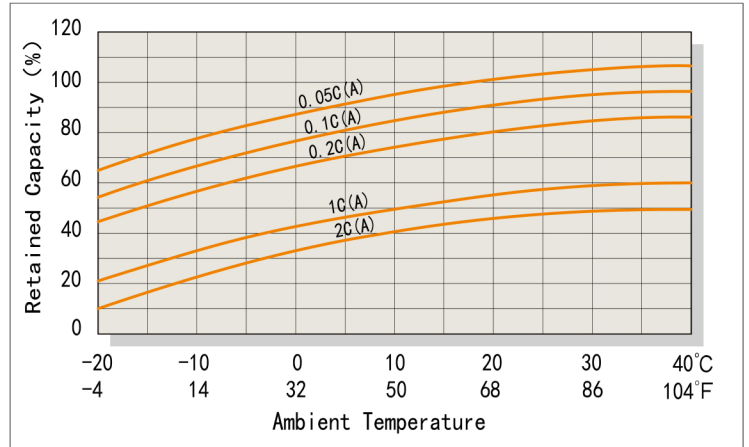
Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

F.V/Time	30min	45min	1h	2h	3h	5h	8h	10h
1.60V	377	282	235	143.2	126.7	84.5	52.3	43.68
1.67V	367	274	232	142.2	124.8	84.3	52.0	43.58
1.7V	356	268	230	141.8	123.2	84.0	51.9	43.47
1.75V	336	255	224	139.0	118.6	83.0	51.5	43.11
1.8V	311	238	218	136.0	113.7	80.7	50.6	42.44
1.85V	278	214	206	131.7	107.8	75.8	48.8	41.15

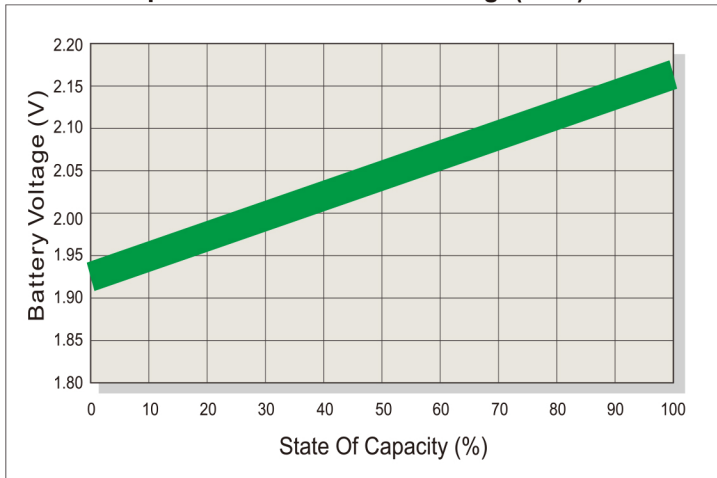
Charging characteristic curve



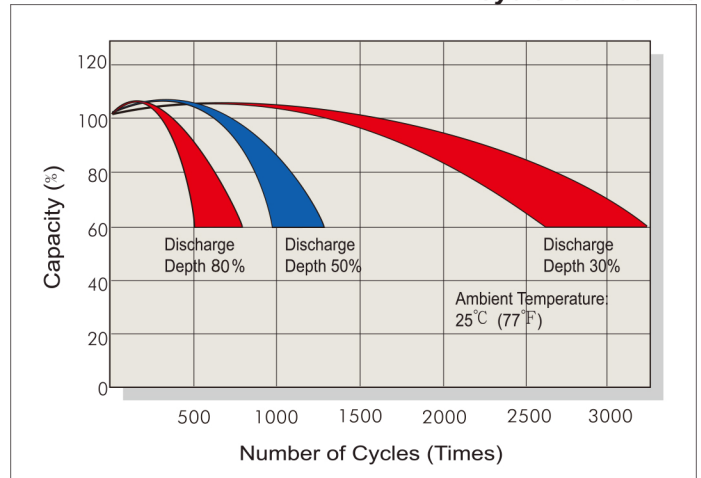
Temperature Effects on Capacity



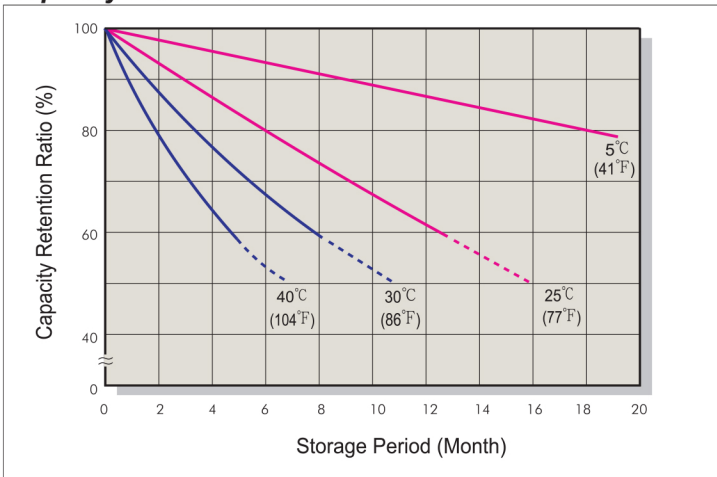
Relationship of OCV And State of Charge(20°C)



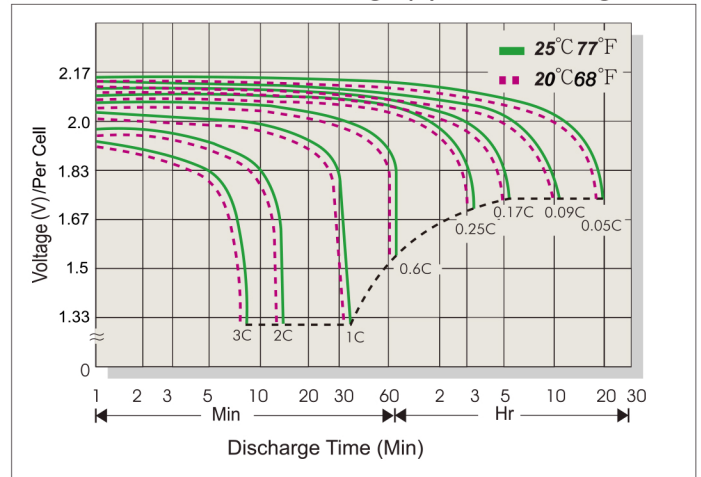
Cycle Service Life



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%