

DEEP CYCLE SERIES VRLA BATTERY

By combining up-to-date DCP-II formula in the positive plates and enhanced electrolyte for VRLA, We created an innovative range of DC batteries. This range features deep cycling use with long life. It is especially designed for electricity vehicles, i.e. home mobility equipment, electric road vehicles, golf cart, electric tricycle, washing floor machine and other devices require DC motive power sources.

12 V voltage **14Ah** capacity **AGM** tech **Enhanced** deep cycling

TECHNICAL SPECIFICATIONS

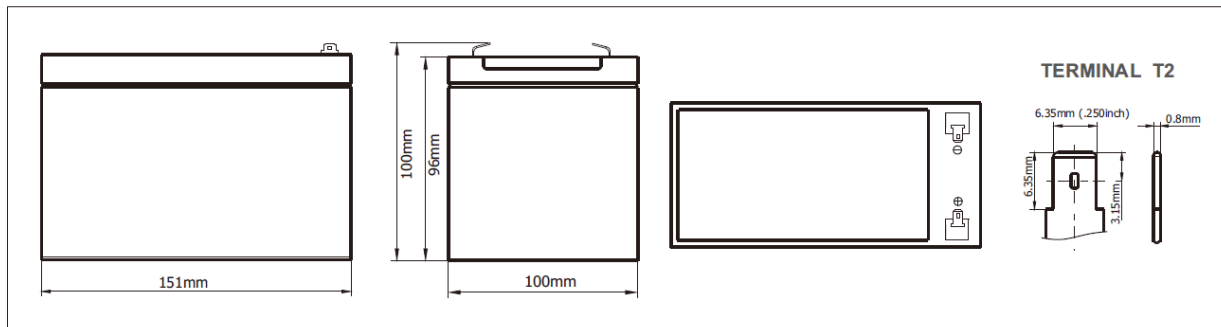
Nominal Voltage (V)	12 (6 cells per unit)
Designed Floating Life (20°C)	5 Years
Nominal Capacity (25°C)	14 Ah @ 10HR-rate (to 1.80Vpc)
Dimension (mm)	L151mm x W100mm x H100mm
Approx. Weight	4.2 kg (9.26 lbs)
Terminal Type	Fasten tab T2
Internal Resistance	Approx. 0.01 Ohm (fully charged @ 25°C)
Max. Charge Current	3.5A
Max. Discharge Current (5S)	180 A
Short Circuit Current	700 A
Self Discharge	Approx. 3% per month @ 20°C
Ambient Temperature	Discharge: -20~60°C Charge: -20~60°C Storage: -20~45°C
Float Charge Voltage	13.6V @25°C (-3mV/ cell/ °C)
Cycle Use Charge Voltage	14.4-14.7V @25°C
Container Material	ABS (UL94-V0 optional)



Complied standards

- IEC61056
- GB/T19639
- GB/T22199
- JIS C8707
- UL1989

BATTERY DIMENSIONS



BATTERY DISCHARGE TABLE

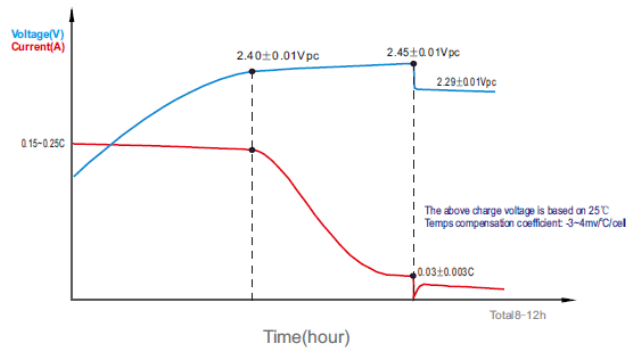
Constant Current Discharge Characteristics: Amps (25°C)											
F.V/Time	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	39.8	30.5	18.6	10.9	6.24	4.45	3.46	2.83	1.81	1.46	0.80
1.67V	38.5	29.5	18.2	10.8	6.16	4.40	3.41	2.80	1.78	1.44	0.79
1.70V	36.8	28.7	17.9	10.6	6.10	4.36	3.37	2.76	1.76	1.42	0.78
1.75V	35.2	28.0	17.4	10.4	6.00	4.31	3.33	2.72	1.74	1.41	0.77
1.80V	33.2	27.3	17.1	10.2	5.94	4.25	3.29	2.69	1.73	1.40	0.75
1.85V	31.3	26.6	16.8	10.0	5.85	4.20	3.26	2.67	1.71	1.38	0.73

Constant Power Discharge Characteristics: W/cell (25°C)											
F.V/Time	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	68.8	53.3	31.4	18.9	11.2	7.94	6.24	5.09	3.46	2.76	1.44
1.67V	67.1	51.8	30.9	18.7	11.1	7.90	6.18	5.07	3.44	2.74	1.43
1.70V	64.9	50.9	30.6	18.6	11.1	7.89	6.15	5.04	3.43	2.72	1.42
1.75V	62.8	50.2	30.2	18.5	11.0	7.87	6.14	5.00	3.42	2.71	1.39
1.80V	59.9	49.5	29.9	18.2	11.0	7.82	6.11	4.99	3.41	2.70	1.37
1.85V	57.2	48.8	29.6	18.1	10.9	7.80	6.10	4.98	3.38	2.69	1.35

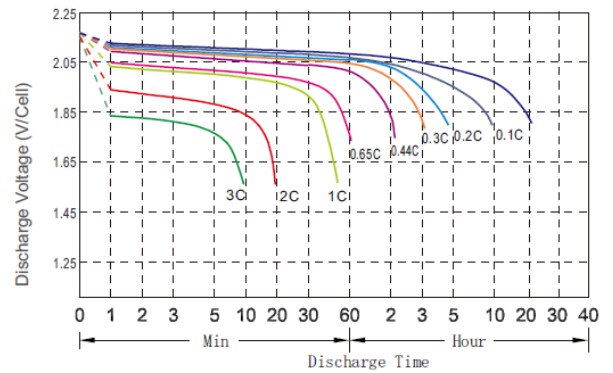
CHARACTERISTICS

3-Phases Fast Charge Characteristic

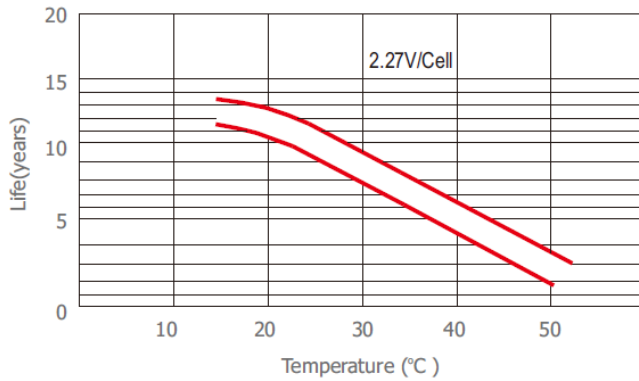
(after 60-100%Depth of discharge)



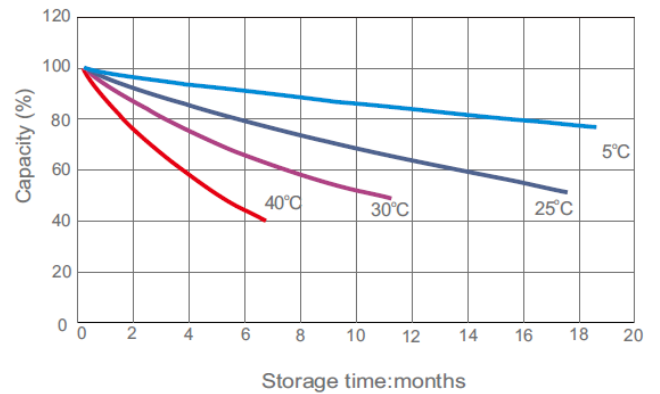
Discharge Characteristic (25°C)



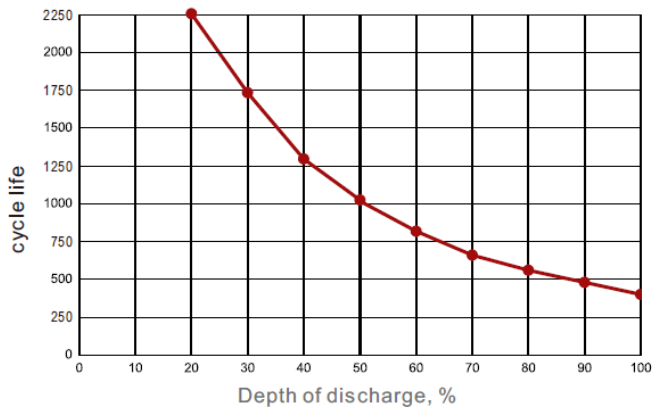
Temperature vs Float Life



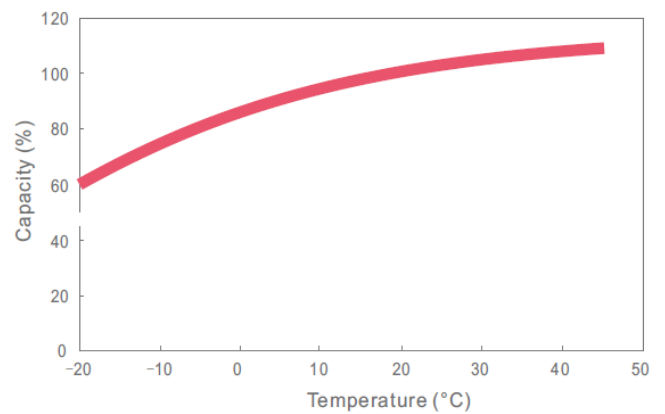
Self discharge characteristics



Cycle life vs Depth of Discharge



Capacity vs Temperature



FINAL VOLTAGE SETTINGS RECOMMENDED ACCORDING TO THE DISCHARGE CURRENT

Discharge Current I(A)	$I \leq 0.08C$	$0.08C \leq I < 0.2C$	$0.2C \leq I < 0.6C$	$0.6C \leq I < 1.0C$	$I \geq 1.0C$
Final of Voltage	$\geq 1.85V_{pc}$	$\geq 1.80V_{pc}$	$\geq 1.75V_{pc}$	$\geq 1.70V_{pc}$	$\geq 1.60V_{pc}$