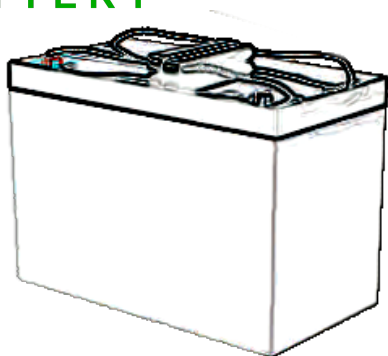




LIVEN LVJ Series

LVJ Hybrid Gel series are manufactured with AGM separator (Absorbent Glass Material) and patented Gel electrolyte. The LVJ series Valve Regulated Lead Acid (VRLA) is Hybrid Gel battery with 12 years floating design life. This battery it's ideal for standby or frequent cyclic discharge applications.

The number of deep discharge cycles is increase much compared with normal AGM, 400 cycles at 100% DOD.

Application:

- Telecommunications
- Solar System
- Uninterrupted Power Supplies
- Wind Power System
- Medical equipments
- Auto Control System

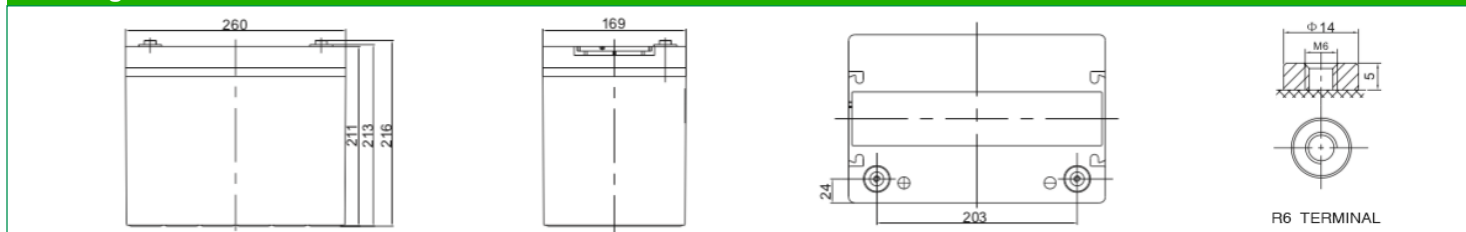
Dimensions:

Length	260±2mm (10.2 inches)
Width	169±2mm (6.65 inches)
Height	211±2mm (8.31 inches)
Total Height	216±2mm (8.50 inches)

Specification:

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	75Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 23.5 Kg ±2%
Internal Resistance	Approx. 5.8 mΩ
Terminal	R6
Max. Discharge Current	750A (5 sec)
Design Life	12 years floating Eurobat (20°C): 10-12 years Long Life
Recommended Maximum Charging Current	22.5 A
Standby Use 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	LIVEN 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 charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Drawing:



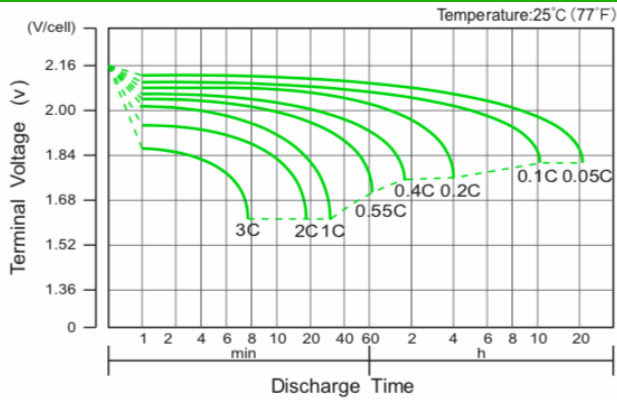
Constant Current Discharge (CC, Unit: A) at 25°C (77°F)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	183.7	137.1	78.7	45.5	26.6	19.8	15.7	13.2	9.03	7.65	3.90
1.65V	177.6	133.0	77.0	44.6	26.2	19.5	15.5	13.1	8.93	7.57	3.86
1.70V	169.6	127.6	74.8	43.5	25.6	19.1	15.2	12.8	8.79	7.47	3.81
1.75V	158.9	120.4	71.9	41.9	24.7	18.6	14.8	12.5	8.61	7.33	3.75
1.80V	144.6	110.6	67.8	39.8	23.6	17.8	14.2	12.1	8.35	7.13	3.66
1.85V	125.1	97.2	62.0	36.7	22.0	16.7	13.4	11.5	7.97	6.84	3.52

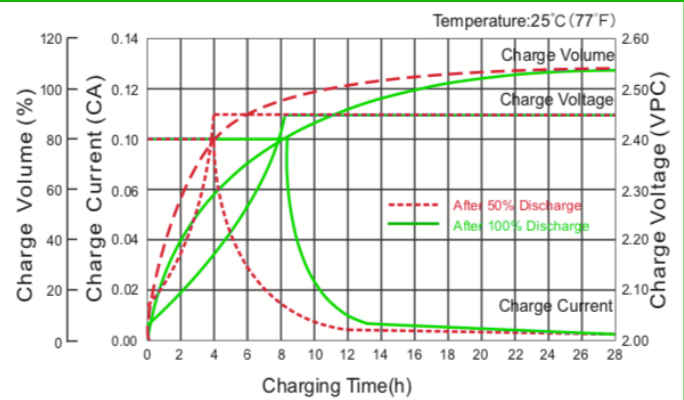
Constant Power Discharge (CP, Unit: W/Battery) at 25°C (77°F)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	1872.0	1440.0	858.0	510.0	303.0	226.8	180.6	153.0	105.6	90.0	46.0
1.65V	1860.0	1422.0	852.0	505.8	300.0	225.0	179.4	151.8	105.0	89.4	45.7
1.70V	1794.0	1380.0	834.0	494.4	294.0	220.8	176.4	149.4	103.2	88.2	45.2
1.75V	1710.0	1320.0	810.0	479.4	285.6	215.4	172.2	146.4	101.4	87.0	44.5
1.80V	1584.0	1230.0	768.0	457.2	273.6	207.6	166.8	142.2	98.4	84.6	43.4
1.85V	1398.0	1098.0	714.0	424.8	256.2	195.6	157.8	135.6	94.2	81.0	41.9

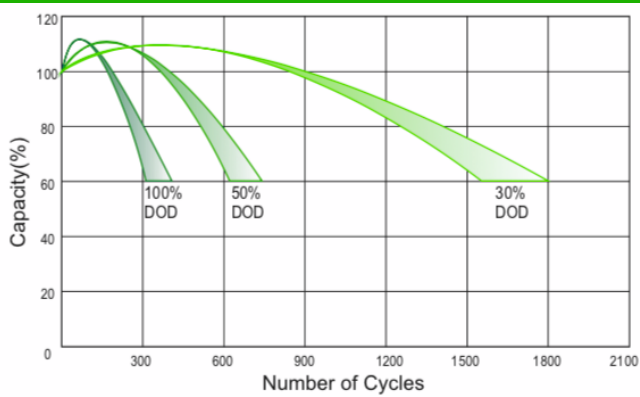
Discharge Characteristics Curve



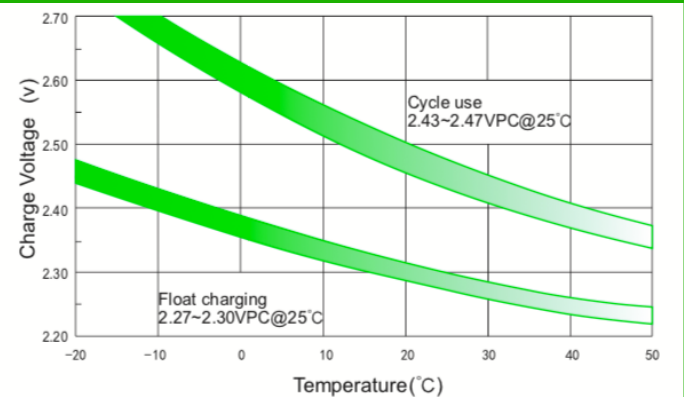
Charge Characteristic Curve For Cycle Use (IU)



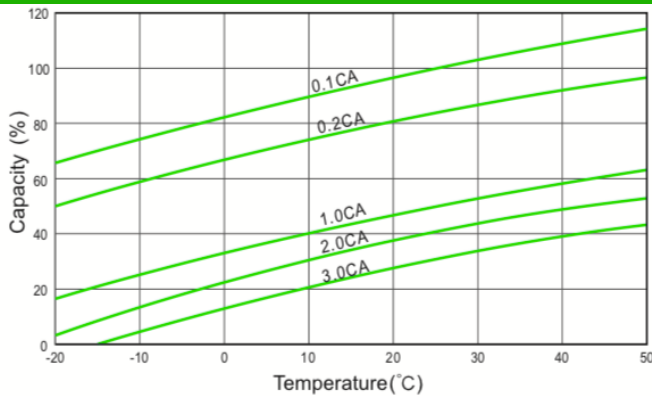
Cycle Life In Relation To Depth of Discharge



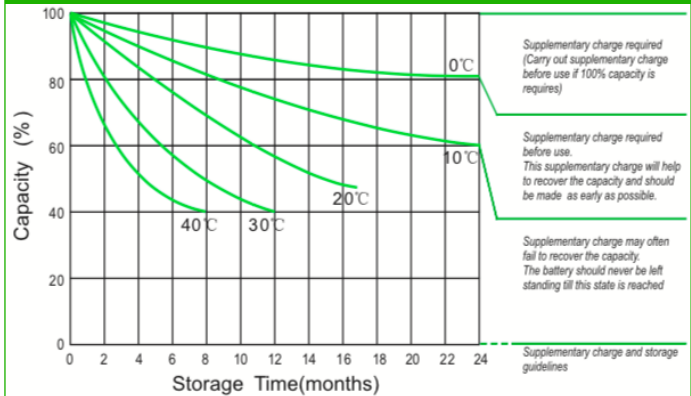
Relationship Between Charging Voltage And Temperature



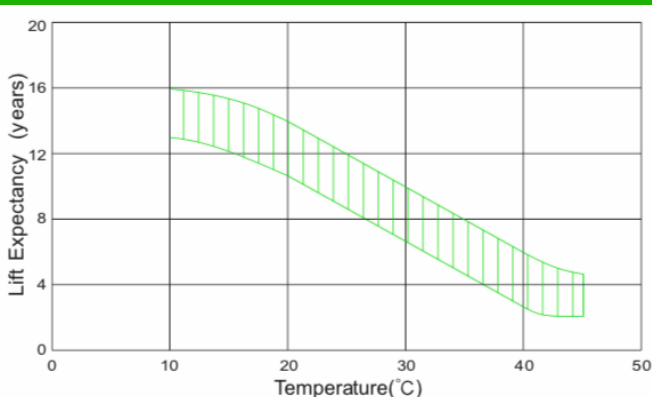
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



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

