

### LIVEN LV Series

AGM (Absorbent Glass Material) technology with gas recombination. VRLA (Valve Regulated Lead Acid Battery). Maintenance-Free Sealed Lead Acid Battery. Battery with 5 years design life in float service. Cycle use 1: Up to 260 cycles at 100% DOD. Cycle use 2: Up to 500 cycles at 50% DOD.

### Application:

- Telecommunications
- Alarm and security system
- Uninterrupted Power Supplies
- Communication power supply
- Medical equipments
- DC power supply
- Emergency backup power supply

### Dimensions:

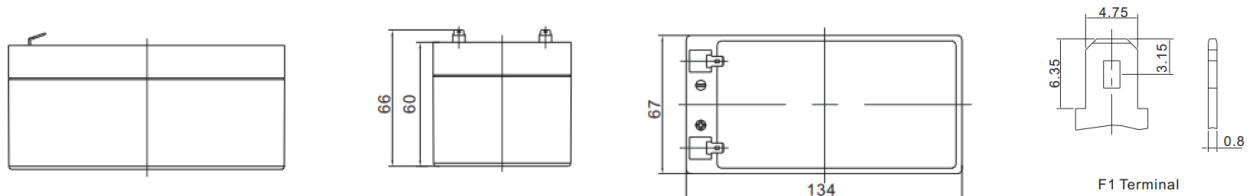
Length	134±1.5mm (5.28 inches)
Width	67±1.5mm (2.64 inches)
Height	60±1.5mm (2.36 inches)
Total Height	66±1.5mm (2.60 inches)

### Specification:

<b>Cells Per Unit</b>	6
<b>Voltage Per Unit</b>	12
<b>Nominal Capacity</b>	3.3Ah@20hour-rate to 1.75V per cell @25°C
<b>Weight</b>	Approx. 1.30 Kg ±2%
<b>Internal Resistance</b>	Approx. 45 mΩ
<b>Terminal</b>	F1
<b>Max. Discharge Current</b>	32A (5 sec)
<b>Short Circuit Current</b>	166A
<b>Design Life</b>	5 years (Float charging) Eurobat (20°C): 3-5 years
<b>Recommended Maximum Charging Current</b>	0.96 A
<b>Standby Use Voltage</b>	13.7 V~13.9 V @ 25°C Temperature Compensation: -3mV/°C/Cell
<b>Cycle Use Voltage</b>	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
<b>Operating Temperature Range</b>	Discharge: -15°C~50°C Charge: -10°C~45°C Storage: -15°C~50°C
<b>Normal Operating Temperature Range</b>	25°C±5°C
<b>Self Discharge</b>	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.
<b>Container Material</b>	A.B.S. UL94-HB, UL94-V0 Optional.



### Drawing:



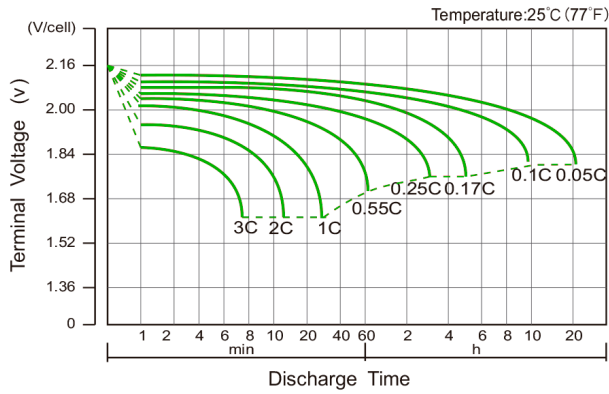
### Constant Current Discharge (CC, Unit: A) at 25°C (77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	12.69	8.274	6.104	3.533	2.041	1.204	0.875	0.697	0.589	0.393	0.320	0.171
1.65V	12.23	8.028	5.944	3.455	2.003	1.187	0.864	0.688	0.582	0.389	0.317	0.169
1.70V	11.63	7.704	5.734	3.352	1.953	1.163	0.848	0.677	0.573	0.384	0.313	0.167
1.75V	10.87	7.286	5.460	3.218	1.887	1.132	0.828	0.662	0.561	0.377	0.308	0.165
1.80V	9.901	6.751	5.108	3.044	1.801	1.091	0.801	0.641	0.545	0.368	0.301	0.162
1.85V	8.713	6.082	4.663	2.822	1.691	1.038	0.765	0.615	0.524	0.355	0.291	0.159

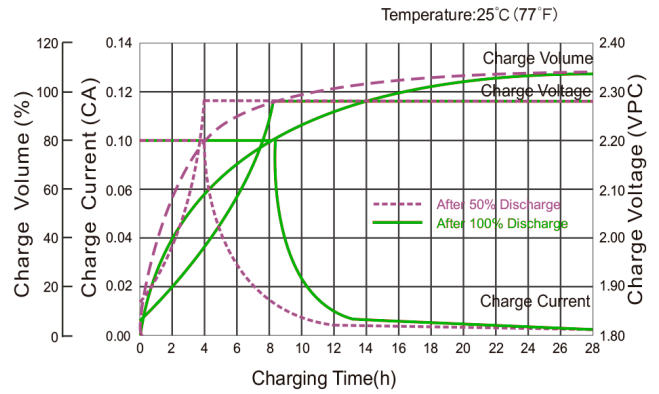
### Constant Power Discharge (CP, Unit: W/Battery) at 25°C (77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	131.04	85.68	64.98	39.06	23.22	13.92	10.20	8.16	6.90	4.68	3.84	1.98
1.65V	129.66	85.32	64.62	38.76	23.04	13.80	10.08	8.10	6.84	4.62	3.78	1.98
1.70V	124.68	82.80	62.88	37.86	22.56	13.56	9.96	7.98	6.78	4.56	3.78	1.98
1.75V	118.56	79.68	60.72	36.72	21.90	13.26	9.78	7.80	6.66	4.50	3.72	1.92
1.80V	109.92	75.12	57.66	35.10	21.00	12.84	9.48	7.62	6.48	4.44	3.60	1.92
1.85V	98.46	68.88	53.34	32.82	19.86	12.30	9.12	7.32	6.24	4.26	3.48	1.86

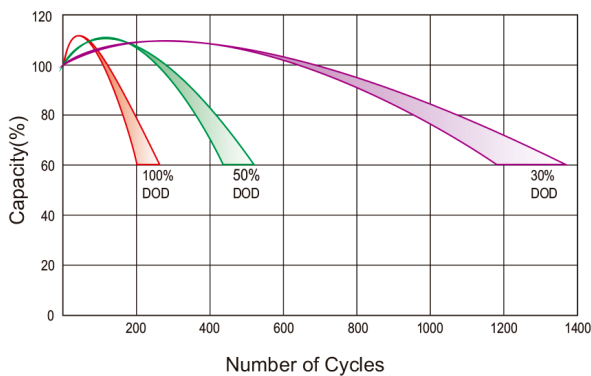
**Discharge Characteristics Curve**



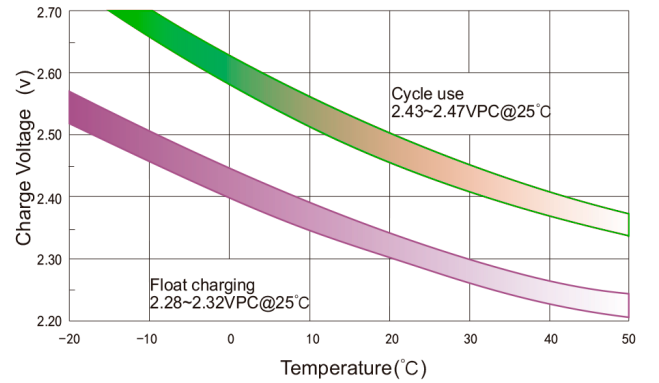
**Charge Characteristic Curve For Standby Use**



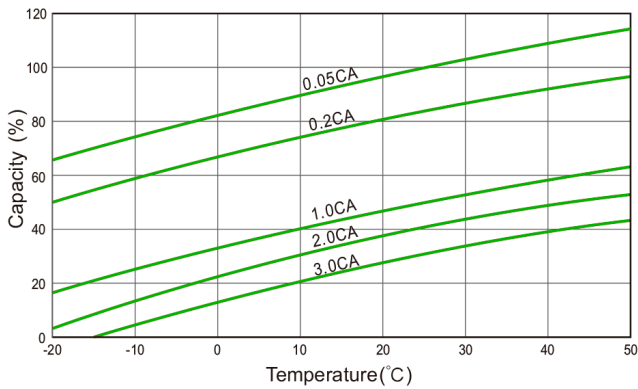
**Cycle Life In Relation To Depth Of Discharge**



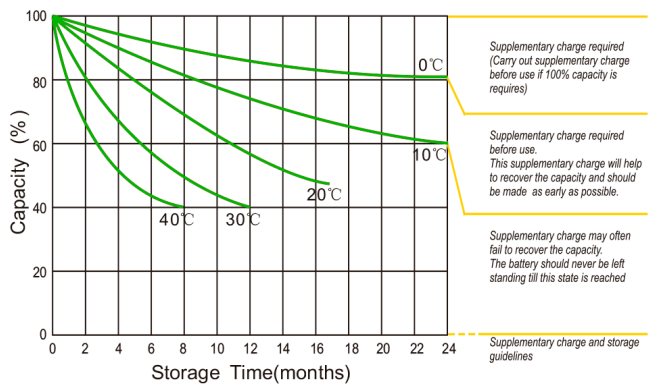
**Relationship Between Charging Voltage And Temperature**



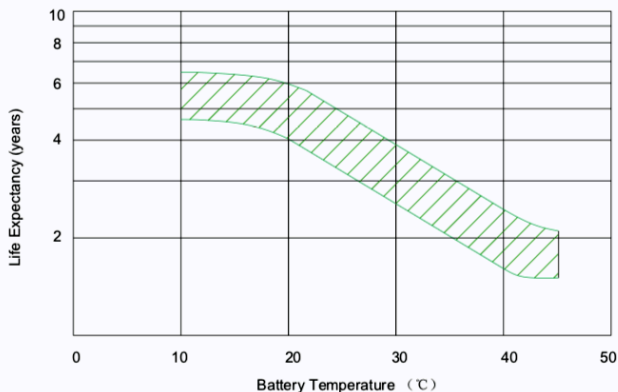
**Temperature Effects On Capacity**



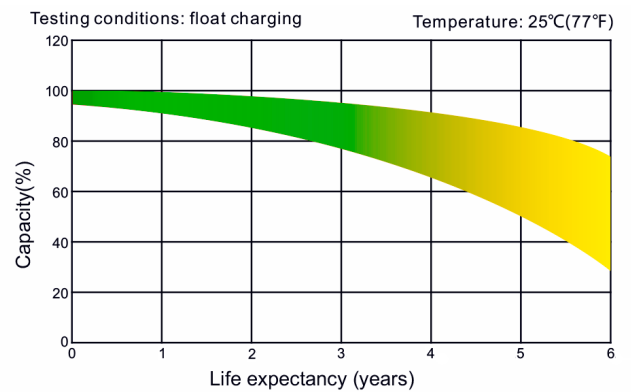
**Storage Characteristics**



**Effect Of Temperature On Long Term Life**



**Life Characteristics Of Standby Use**



(Note) All above information shall be changed without prior notice. LIVEN Battery reserves the right to explain and update the latest information.