



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.

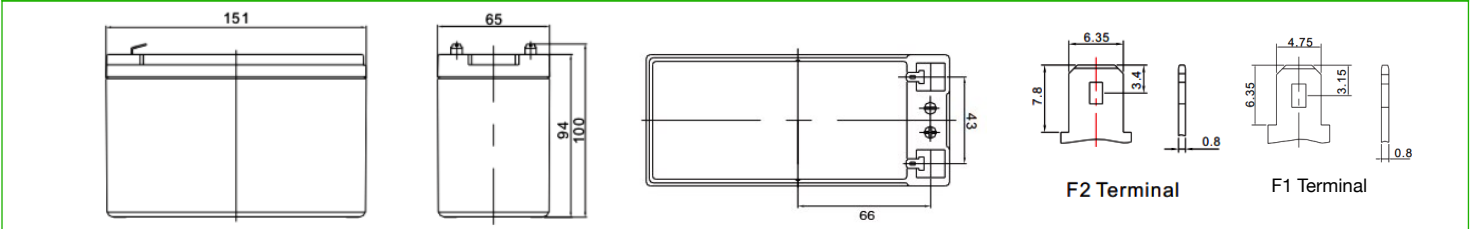
Applications:

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

Dimensions:

Length	151±1.5mm (5.94in)
Width	65±1.5mm (2.56in)
Height	94±1.5mm (3.70in)
Total Height	100±1.5mm (3.94in)

Technical Drawings:



Specifications:

Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	7.2Ah @20hour-rate to 1.75V per cell @25°C
Weight	Approx. 2.20Kg ±2% (4.85lbs)
Internal Resistance	Approx. 22mΩ
Terminal	F1 / F2 (optional)
Max. Discharge Current	72A (5sec)
Short Circuit Current	260A
Design Life	5 years (Float charging) Eurobat (20°C): 3-5 years
Recommended Maximum Charging Current	2.16A
Standby Use Voltage	13.5V~13.8V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.4V~15.0V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -15°C~50°C Charge: -10°C~45°C Storage: -15°C~50°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.

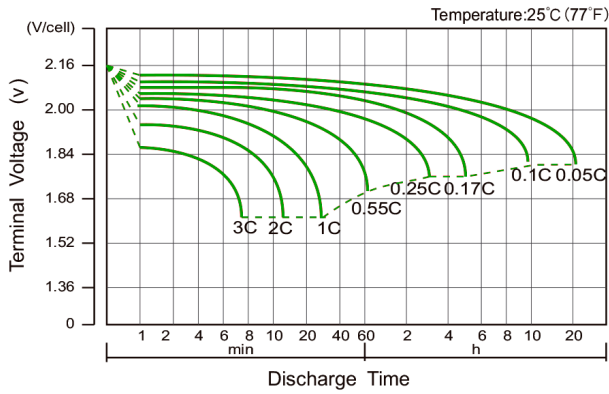
Constant Current Discharge (CC, Unit: A) at 25°C (77°F)

F.V./ Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	28.55	18.62	13.73	7.948	4.593	2.710	1.970	1.569	1.324	0.885	0.721	0.375
1.65V	27.52	18.06	13.37	7.774	4.508	2.670	1.944	1.549	1.309	0.876	0.714	0.372
1.70V	26.17	17.33	12.90	7.543	4.395	2.617	1.909	1.523	1.288	0.864	0.705	0.368
1.75V	24.45	16.39	12.29	7.241	4.247	2.548	1.863	1.489	1.261	0.848	0.693	0.363
1.80V	22.28	15.19	11.49	6.850	4.053	2.456	1.802	1.443	1.226	0.827	0.676	0.355
1.85V	19.60	13.69	10.49	6.350	3.804	2.336	1.722	1.384	1.179	0.799	0.655	0.346

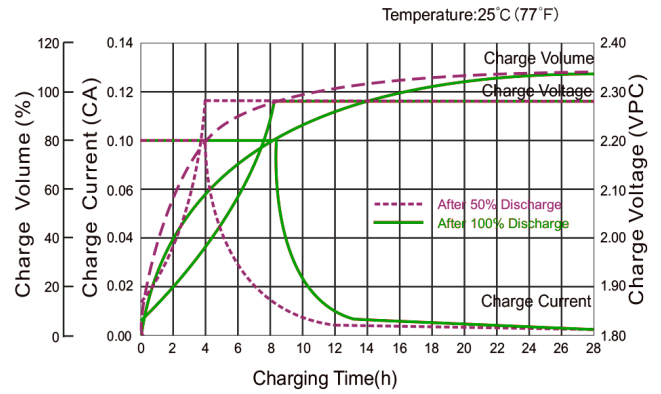
Constant Power Discharge (CP, Unit: W/Battery) at 25°C (77°F)

F.V./ Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	294.78	192.72	146.22	87.90	52.32	31.26	22.92	18.36	15.54	10.50	8.64	4.50
1.65V	291.72	191.94	145.38	87.30	51.84	31.02	22.74	18.18	15.42	10.44	8.58	4.44
1.70V	280.56	186.24	141.48	85.14	50.76	30.54	22.38	17.94	15.24	10.32	8.46	4.44
1.75V	266.82	179.34	136.68	82.62	49.26	29.82	21.96	17.58	14.94	10.14	8.34	4.38
1.80V	247.32	169.08	129.66	78.90	47.28	28.92	21.30	17.10	14.58	9.90	8.16	4.26
1.85V	221.52	155.04	120.06	73.86	44.70	27.66	20.46	16.50	14.10	9.60	7.92	4.20

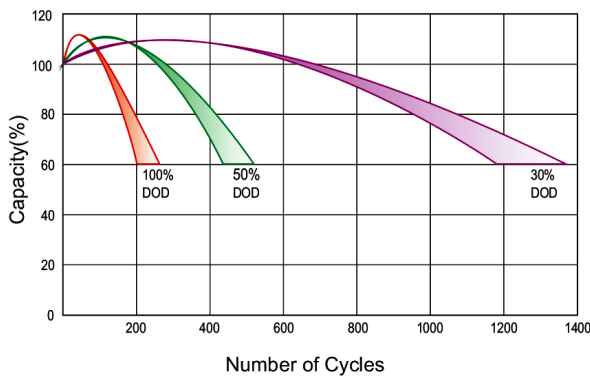
Discharge Characteristics Curve



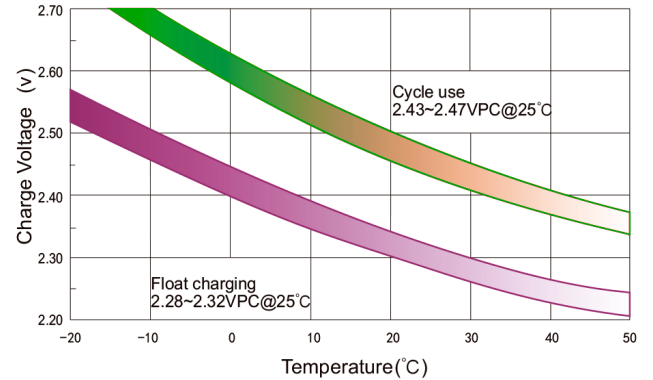
Charge Characteristic Curve For Standby Use



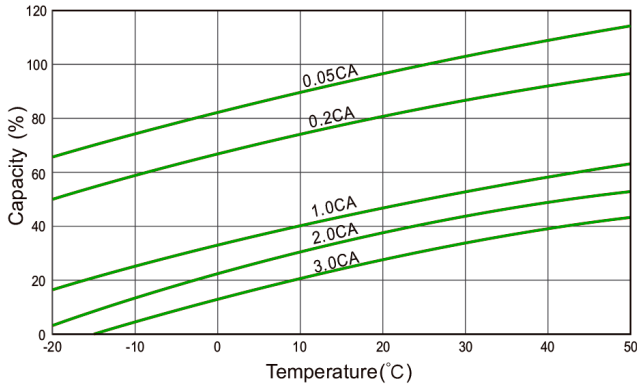
Cycle Life In Relation To Depth Of Discharge



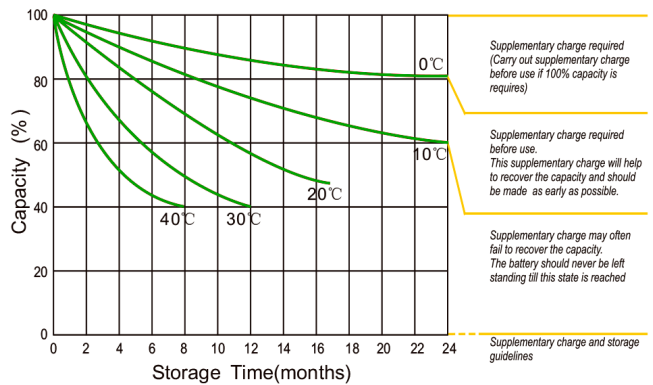
Relationship Between Charging Voltage And Temperature



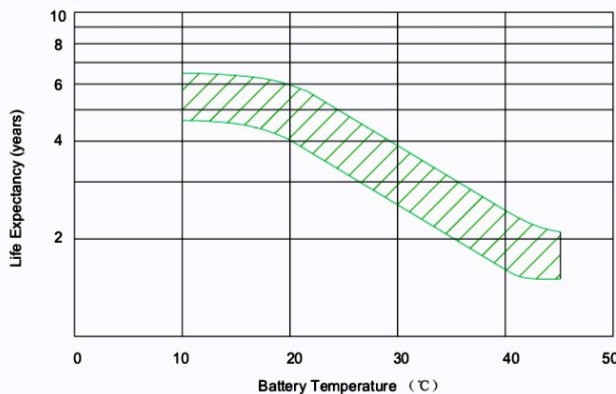
Temperature Effects On Capacity



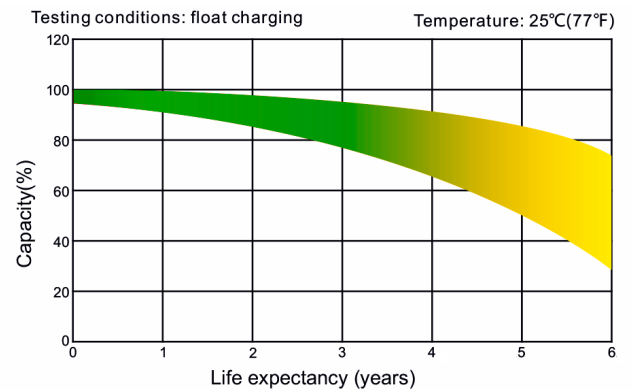
Storage Characteristics



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.