



### 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	47.5±1.5mm (1.87in)
Width	47.5±1.5mm (1.87in)
Height	102±1.5mm (4.02in)
Total Height	107±1.5mm (4.21in)

### Technical Drawings:



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

F.V./Time	5min	10min	15min	30min	45min	1h	1.5h	2h	3h	5h	8h	10h	20h
1.70V	16.63	11.10	8.79	4.54	3.41	2.57	2.09	1.60	1.20	0.754	0.505	0.437	0.230
1.75V	15.94	10.89	8.60	4.40	3.33	2.55	2.05	1.54	1.16	0.742	0.500	0.433	0.228
1.80V	15.08	10.63	8.35	4.24	3.19	2.53	2.00	1.47	1.12	0.730	0.495	0.428	0.225

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

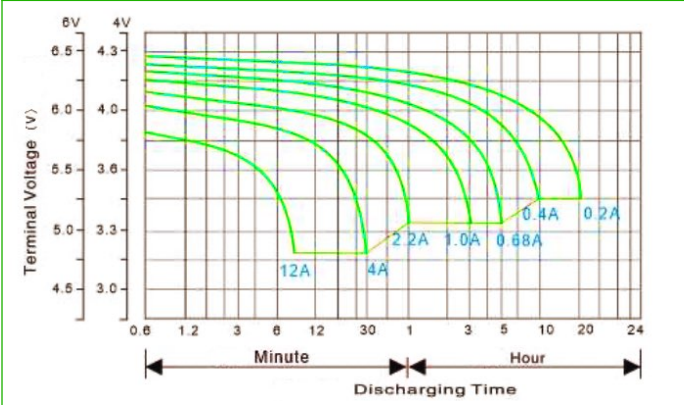
F.V./Time	5min	10min	15min	30min	45min	1h	1.5h	2h	3h	5h	8h	10h	20h
1.70V	60.47	43.60	35.00	19.93	14.53	11.05	8.48	6.38	4.55	3.00	2.11	1.71	0.92
1.75V	57.93	42.13	34.02	19.52	14.19	10.88	8.35	6.29	4.45	2.97	2.09	1.69	0.91
1.80V	54.93	40.60	32.92	18.95	13.83	10.70	8.23	6.20	4.37	2.93	2.07	1.65	0.88

### Specifications:

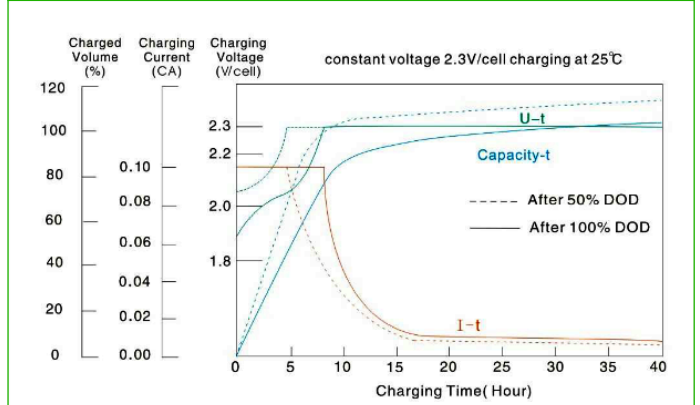
Cells Per Unit	2
Voltage Per Unit	4V
Nominal Capacity	4.5Ah @20hour-rate to 1.75V per cell @25°C
Weight	Approx. 0.49Kg ±2% (1.08lbs)
Internal Resistance	Approx. 11.2mΩ
Terminal	F1
Design Life	5 years (Float charging) Eurobat (20°C): 3-5 years
Recommended Maximum Charging Current	0.027A
Standby Use Voltage	4.5V~4.6V @ 25°C Temperature Compensation: -6mV/°C/Cell
Cycle Use Voltage	4.7V~4.8V @ 25°C Temperature Compensation: -6mV/°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.

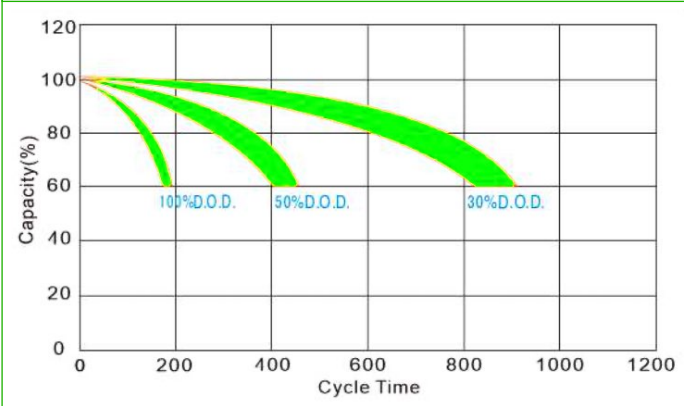
Discharge Characteristics Curve



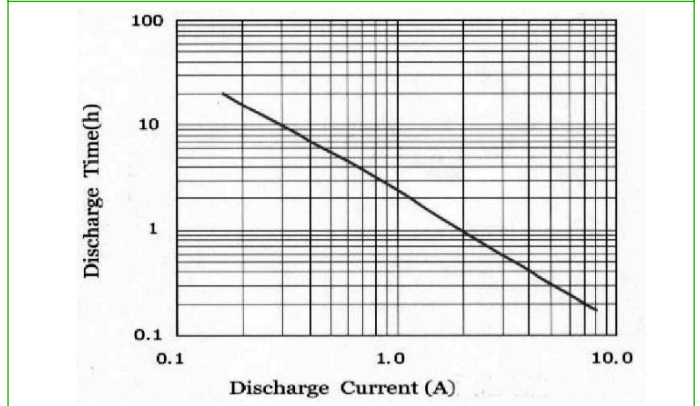
Charge Characteristic Curve For Standby Use



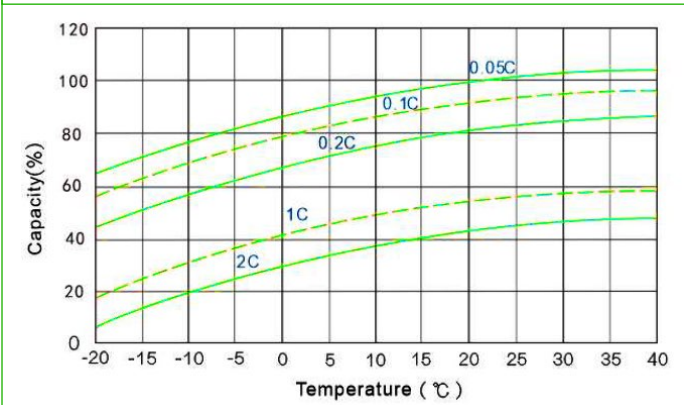
Cycle Life In Relation To Depth Of Discharge



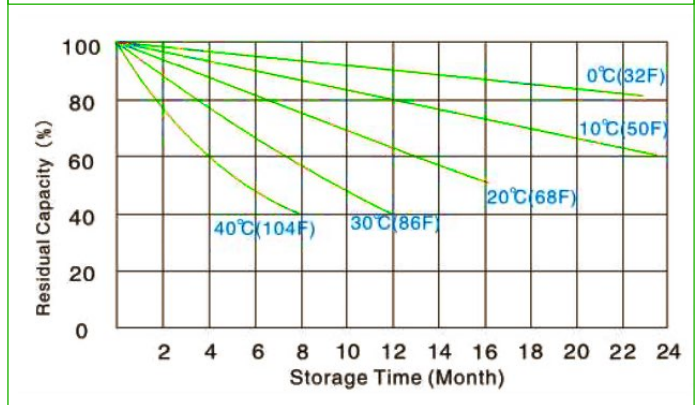
Discharge Current & Discharge Duration Time



Temperature Effects On Capacity



Storage Characteristics



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