



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	90±1.5mm (3.54in)
Width	70±1.5mm (2.76in)
Height	101±1.5mm (3.98in)
Total Height	107±1.5mm (4.21in)

Specifications:

Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	5.0Ah @20hour-rate to 1.75V per cell @25°C
Weight	Approx. 1.60Kg ±2% (3.53lbs)
Internal Resistance	Approx. 35mΩ
Terminal	F1 / F2 (optional)
Max. Discharge Current	50A (5sec)
Short Circuit Current	250A
Design Life	5 years (Float charging) Eurobat (20°C): 3-5 years
Recommended Maximum Charging Current	1.5A
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

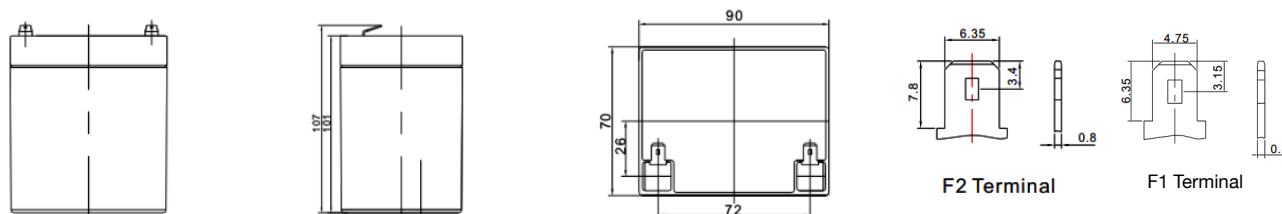
Self Discharge

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.

Technical Drawings:



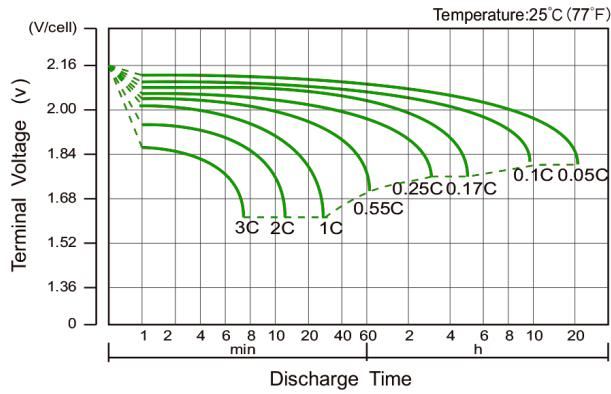
Constant Current Discharge (CC, Unit: A) at 25°C (77°F)

F.V./ Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	19.82	12.93	9.538	5.520	3.189	1.882	1.368	1.089	0.920	0.614	0.500	0.260
1.65V	19.11	12.54	9.288	5.398	3.130	1.854	1.350	1.076	0.909	0.608	0.496	0.258
1.70V	18.18	12.04	8.959	5.238	3.052	1.818	1.326	1.058	0.895	0.600	0.489	0.255
1.75V	16.98	11.38	8.531	5.028	2.949	1.769	1.293	1.034	0.876	0.589	0.481	0.252
1.80V	15.47	10.55	7.981	4.757	2.815	1.705	1.251	1.002	0.851	0.574	0.470	0.247
1.85V	13.61	9.504	7.287	4.409	2.642	1.623	1.196	0.961	0.819	0.555	0.455	0.240

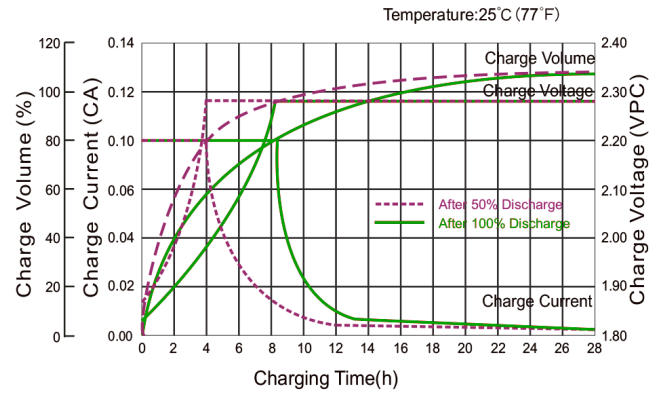
Constant Power Discharge (CP, Unit: W/Battery) at 25°C (77°F)

F.V./ Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	204.72	133.86	101.52	61.08	36.30	21.72	15.90	12.72	10.80	7.32	6.00	3.12
1.65V	202.56	133.26	100.98	60.60	36.00	21.54	15.78	12.66	10.74	7.26	5.94	3.12
1.70V	194.82	129.36	98.22	59.16	35.22	21.18	15.54	12.48	10.56	7.14	5.88	3.06
1.75V	185.28	124.50	94.92	57.36	34.20	20.70	15.24	12.24	10.38	7.02	5.76	3.06
1.80V	171.78	117.42	90.06	54.78	32.82	20.10	14.82	11.88	10.14	6.90	5.64	3.00
1.85V	153.84	107.64	83.40	51.30	31.02	19.20	14.22	11.46	9.78	6.66	5.46	2.88

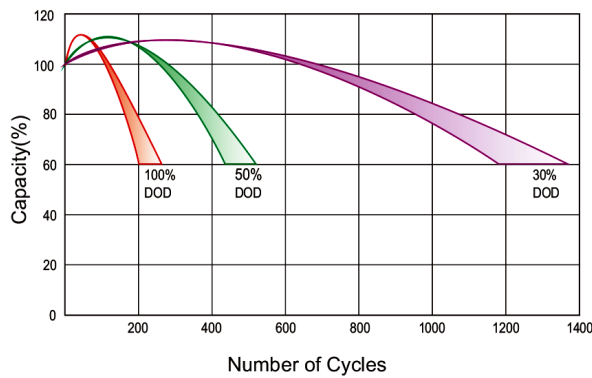
Discharge Characteristics Curve



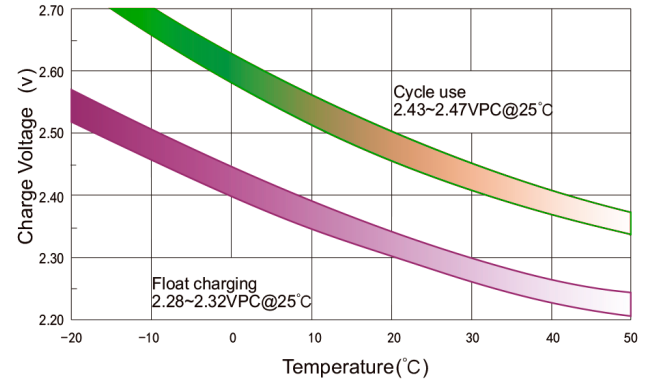
Charge Characteristic Curve For Standby Use



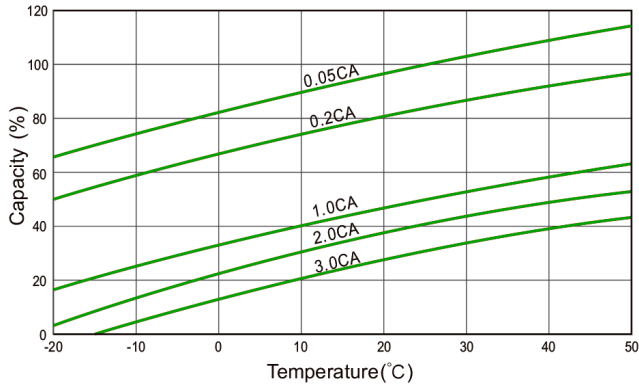
Cycle Life In Relation To Depth Of Discharge



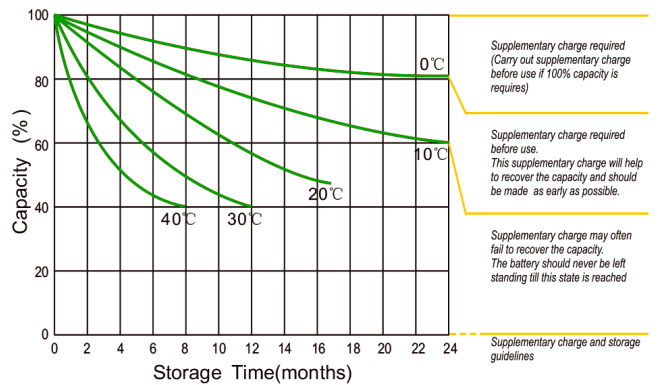
Relationship Between Charging Voltage And Temperature



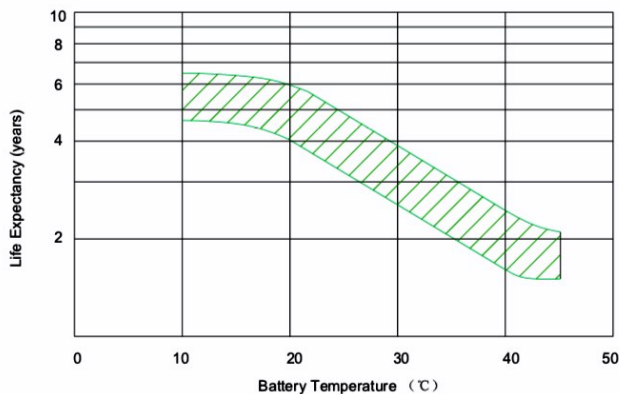
Temperature Effects On Capacity



Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use

