



### LIVEN LVH Series

AGM (Absorbent Glass Material) technology with gas recombination. The LVH series Valve Regulated Lead Acid (VRLA) battery is designed for heavy load discharge applications with 8 years design life in float service.

By using strong grids and specially designed active material is with lower I.R, lower self discharge rate, high power, and longer service life performance.

Generally the LVH series offers 30% more power output than the standard range.

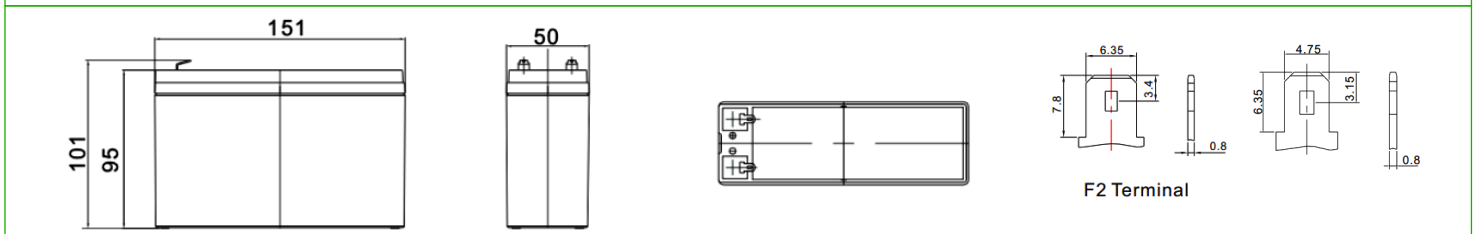
### Applications:

- High Power
- UPS
- Datacenters
- Emergency backup PW
- Security system
- Communication power supply
- DC power supply
- Electric Tools

### Dimensions:

Length	151±1.5mm (5.94in)
Width	50±1.5mm (1.97in)
Height	95±1.5mm (3.74in)
Total Height	101±1.5mm (3.98in)

### Technical Drawings:



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

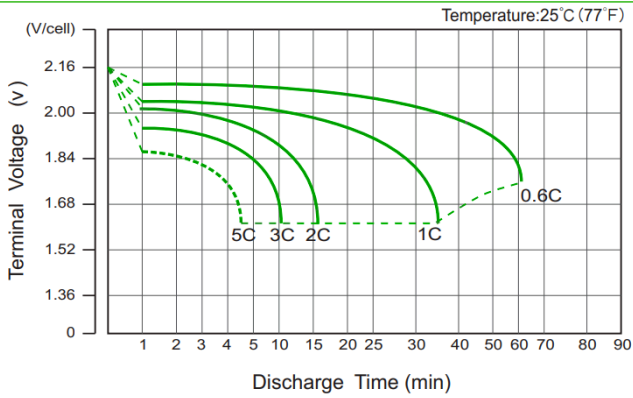
F.V./ Time	3min	5min	8min	10min	15min	20min	30min	60min	90min
1.60V	29.83	25.97	20.55	17.44	12.74	10.01	7.136	4.002	2.837
1.67V	27.07	23.57	18.79	16.08	11.92	9.453	6.762	3.814	2.715
1.70V	25.91	22.55	18.05	15.50	11.55	9.201	6.594	3.731	2.665
1.75V	23.99	20.89	16.81	14.52	10.91	8.742	6.319	3.606	2.584
1.80V	21.98	19.13	15.54	13.55	10.36	8.330	6.043	3.470	2.492
1.85V	18.79	16.36	13.24	11.50	8.883	7.235	5.344	3.137	2.280

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

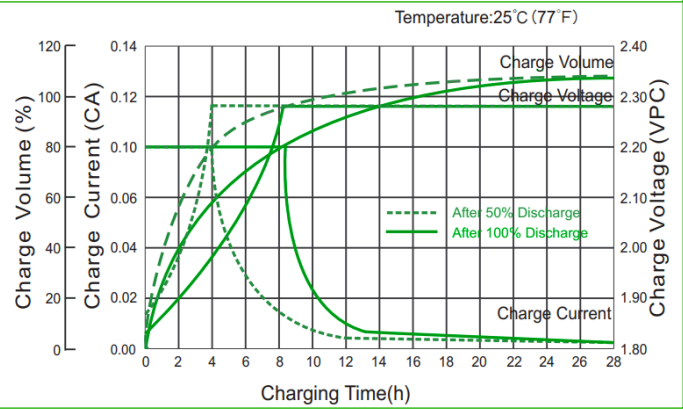
F.V./ Time	3min	5min	8min	10min	15min	20min	30min	60min	90min
1.60V	321.7	280.1	222.4	189.5	146.0	110.6	79.1	45.0	32.2
1.67V	295.6	257.3	206.1	177.2	138.0	105.6	76.2	43.3	31.1
1.70V	285.4	248.5	199.5	171.9	135.1	103.3	74.4	42.6	30.6
1.75V	266.9	232.4	187.9	163.1	128.8	99.4	72.1	41.5	29.9
1.80V	247.8	215.7	175.8	153.8	123.1	95.5	69.7	40.3	29.1
1.85V	215.3	187.4	151.9	132.2	107.0	83.7	62.0	36.6	26.7

Specifications:	
Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	23W @15min-rate to 1.67V per cell @25°C
Weight	Approx. 1.75Kg ±2% (3.86lbs)
Internal Resistance	Approx. 33mΩ
Terminal	F2(+) + F1(-)
Max. Discharge Current	55A (5sec)
Design Life	8 years floating Eurobat (20°C): 6-9 years General Purpose
Recommended Maximum Charging Current	1.65A
Reference Capacity	C20 6Ah
Standby Use Voltage	13.7V~13.9V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6V~14.8V @ 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.

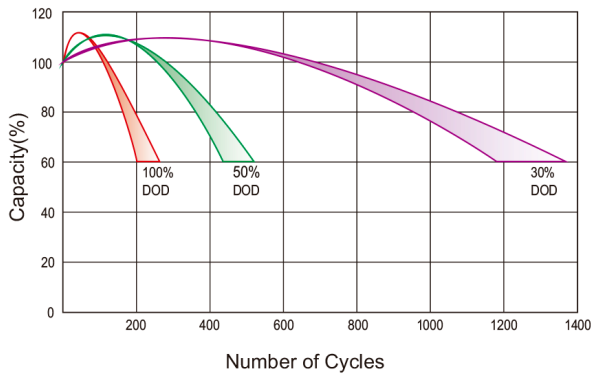
Discharge Characteristics Curve



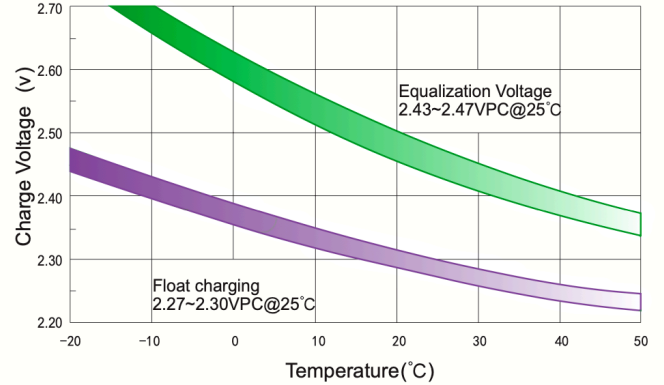
Charge Characteristic Curve For Standby Use



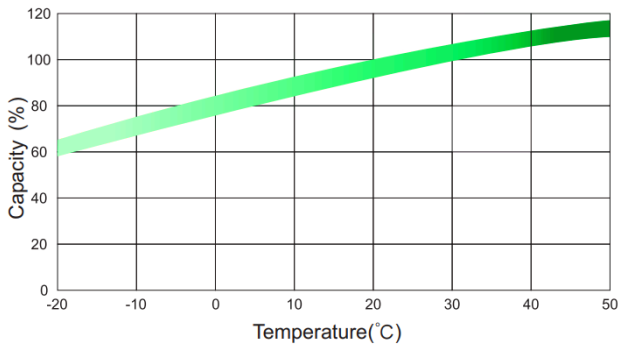
Cycle Life In Relation To Depth Of Discharge



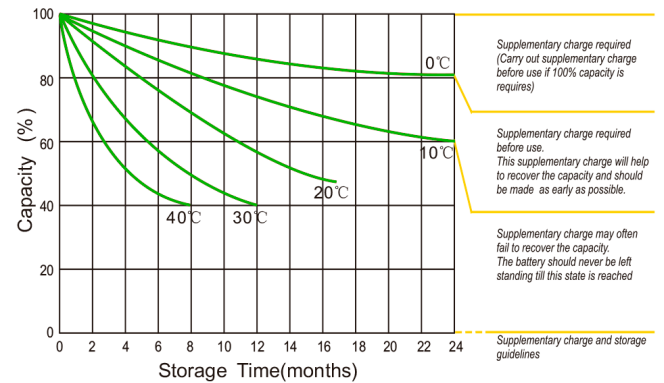
Relationship Between Charging Voltage And Temperature



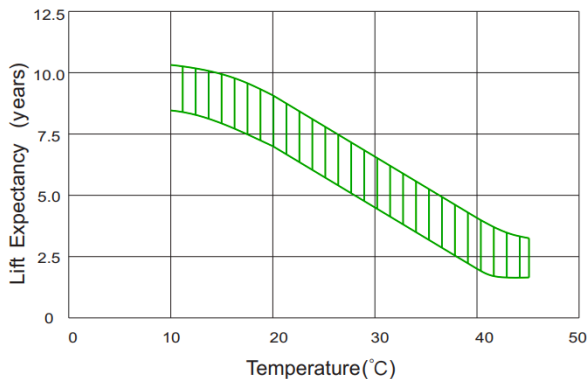
Temperature Effects On Capacity



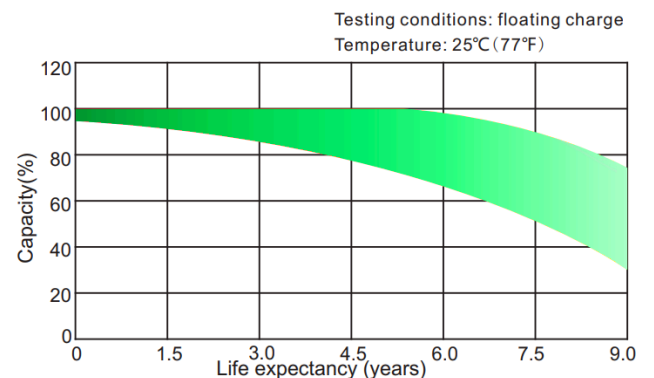
Storage Characteristics



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.