



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 15 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.

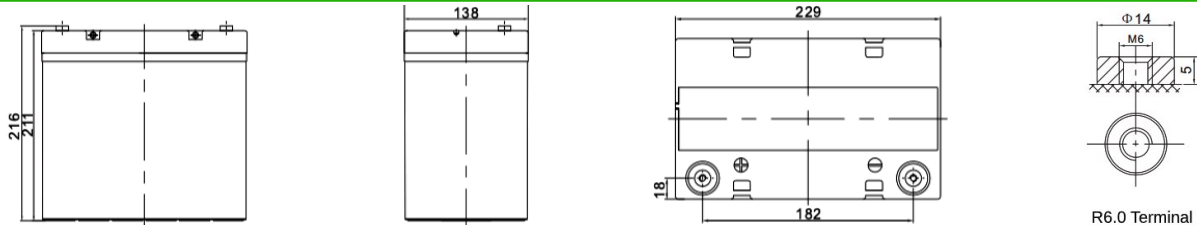
Applications:

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

Dimensions:

Length	229±1mm (9.02in)
Width	138±1mm (5.43in)
Height	211±1mm (8.31in)
Total Height	216±1mm (8.50in)

Technical Drawings:



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

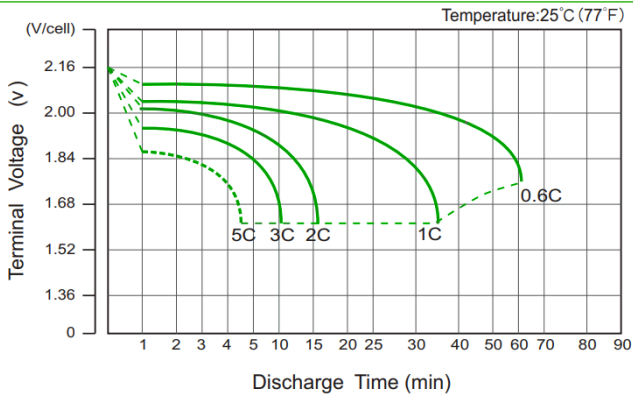
F.V./ Time	5min	8min	10min	15min	20min	30min	60min	90min
1.60V	199.8	165.4	145.0	110.6	90.1	66.4	38.4	27.6
1.67V	181.4	151.7	134.0	103.1	84.6	62.8	36.6	26.4
1.70V	173.6	145.8	129.2	100.0	82.3	61.3	35.9	25.9
1.75V	160.3	135.8	121.1	94.6	78.2	58.7	34.7	25.1
1.80V	146.9	125.8	113.0	89.5	74.5	56.2	33.4	24.3
1.85V	126.1	107.2	95.7	77.0	64.6	49.7	30.2	22.2

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

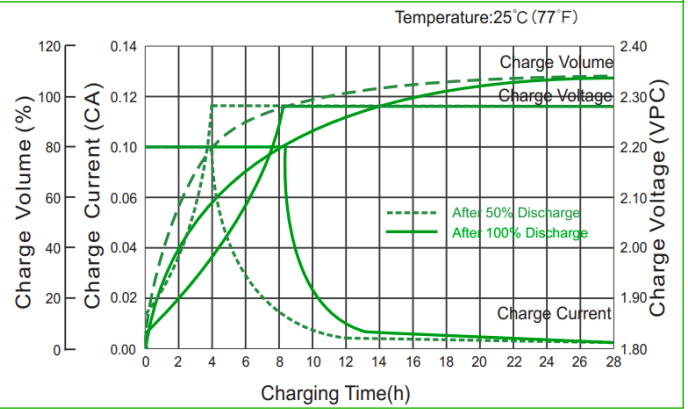
F.V./ Time	5min	8min	10min	15min	20min	30min	60min	90min
1.60V	2203.2	1848.6	1636.2	1264.8	1038.6	774.0	432.6	313.2
1.67V	2050.8	1734.0	1543.8	1200.0	991.2	742.2	416.4	302.4
1.70V	1983.6	1682.4	1500.6	1172.4	969.6	727.2	409.8	298.2
1.75V	1861.2	1590.0	1425.6	1121.4	930.6	703.2	398.4	290.4
1.80V	1732.2	1492.2	1345.8	1071.6	895.8	678.6	386.4	282.6
1.85V	1509.0	1288.8	1155.6	931.2	784.8	605.4	351.6	259.8

Specifications:	
Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	200W @15min-rate to 1.67V per cell @25°C
Weight	Approx. 16.50Kg ±2% (36.38lbs)
Internal Resistance	Approx. 5.7mΩ
Terminal	R6.0
Max. Discharge Current	550A (5sec)
Design Life	15 years floating Eurobat (20°C): >12 years Very Long Life
Recommended Maximum Charging Current	16.5A
Reference Capacity	C20 55Ah
Standby Use Voltage	13.6V~13.8V @ 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.

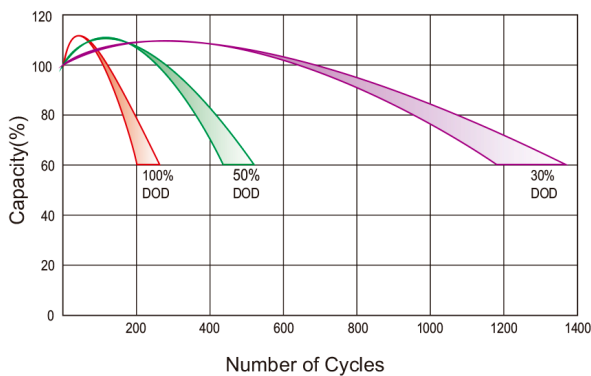
Discharge Characteristics Curve



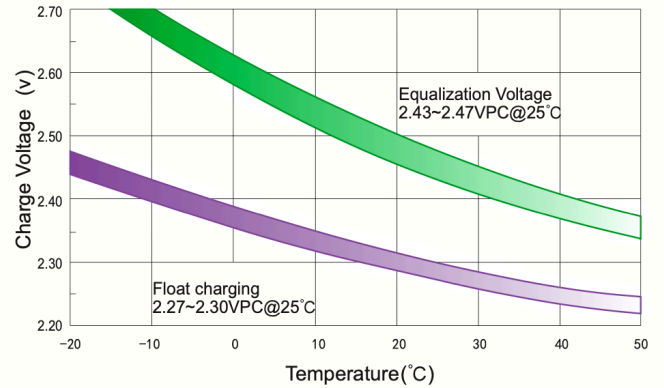
Charge Characteristic Curve For Standby Use



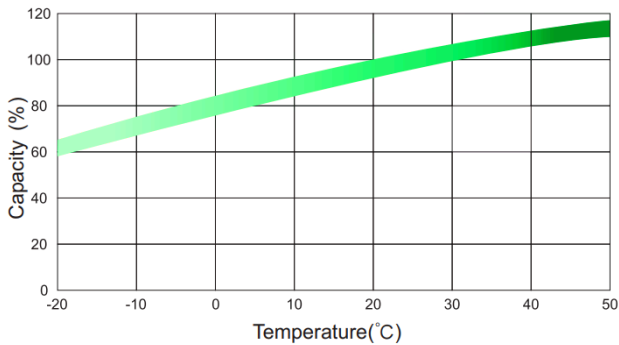
Cycle Life In Relation To Depth Of Discharge



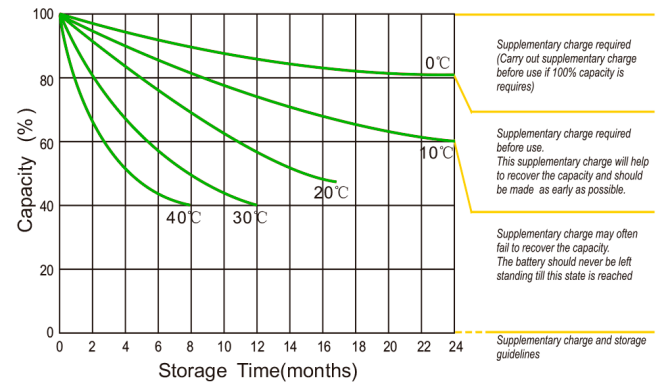
Relationship Between Charging Voltage And Temperature



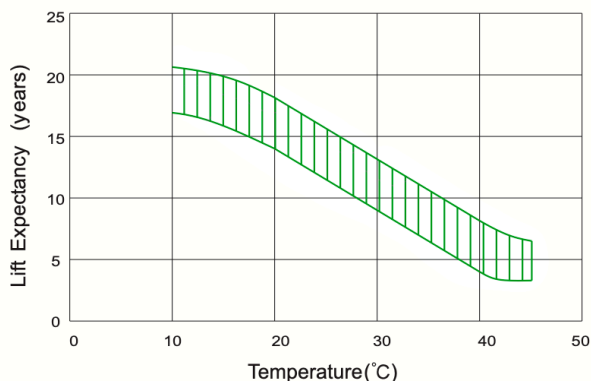
Temperature Effects On Capacity



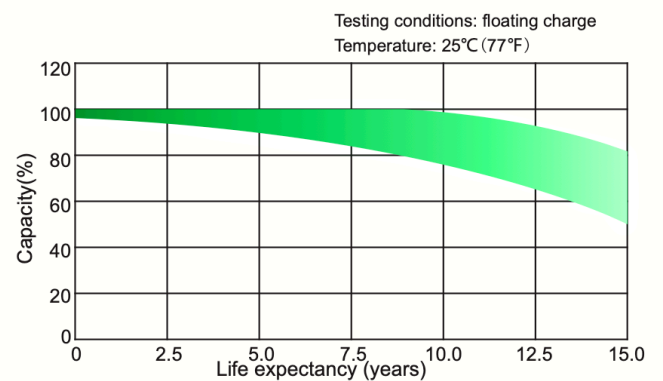
Storage Characteristics



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.