

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.

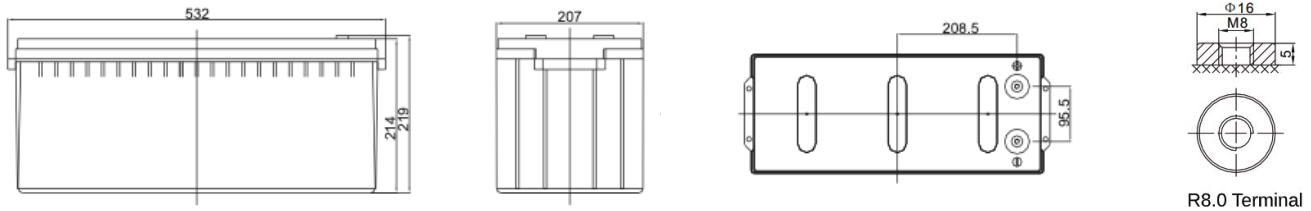
Applications:

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

Dimensions:

Length	532±1mm (20.9in)
Width	207±1mm (8.15in)
Height	214±1mm (8.43in)
Total Height	219±1mm (8.62in)

Technical Drawings:



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

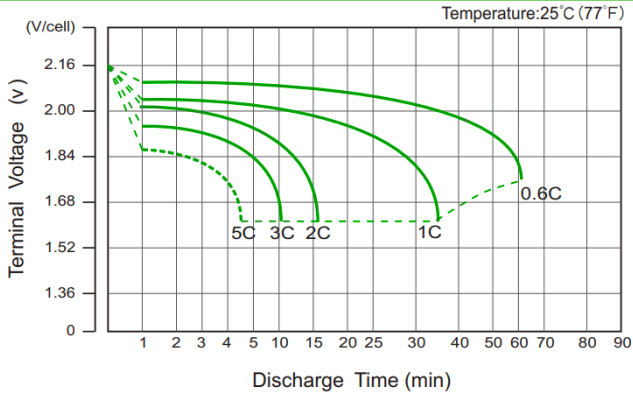
F.V./ Time	5min	8min	10min	15min	20min	30min	60min	90min
1.60V	508.0	451.3	417.9	342.8	279.2	205.8	119.1	85.5
1.67V	461.0	413.9	386.2	319.7	262.4	194.7	113.6	82.0
1.70V	441.4	397.8	372.3	310.0	255.0	190.0	111.3	80.4
1.75V	407.5	370.6	349.1	293.2	242.3	182.0	107.5	77.9
1.80V	373.4	343.2	325.8	277.5	230.9	174.3	103.6	75.3
1.85V	320.5	292.3	276.0	238.6	200.4	154.2	93.6	68.7

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

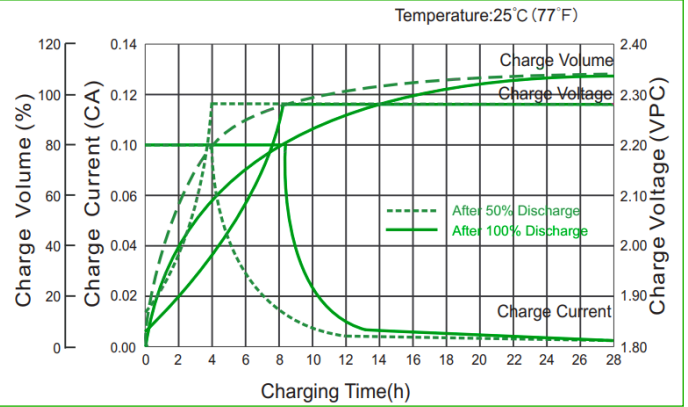
F.V./ Time	5min	8min	10min	15min	20min	30min	60min	90min
1.60V	5601.0	5043.0	4716.6	3921.0	3219.0	2398.8	1341.6	970.2
1.67V	5212.8	4731.0	4450.8	3720.0	3072.6	2300.4	1291.8	938.4
1.70V	5041.2	4589.4	4326.6	3633.6	3006.0	2254.2	1270.2	924.6
1.75V	4731.0	4336.8	4109.4	3476.4	2885.4	2179.8	1235.4	900.0
1.80V	4403.4	4071.0	3880.8	3321.6	2776.8	2103.0	1198.8	875.4
1.85V	3835.8	3516.0	3331.8	2887.2	2433.0	1876.2	1090.2	805.2

Specifications:	
Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	620W @15min-rate to 1.67V per cell @25°C
Weight	Approx. 56.0Kg ±2% (123.46lbs)
Internal Resistance	Approx. 3.8mΩ
Terminal	R8.0
Max. Discharge Current	1800A (5sec)
Design Life	15 years floating Eurobat (20°C): >12 years Very Long Life
Recommended Maximum Charging Current	54.0A
Reference Capacity	C20 180Ah
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.

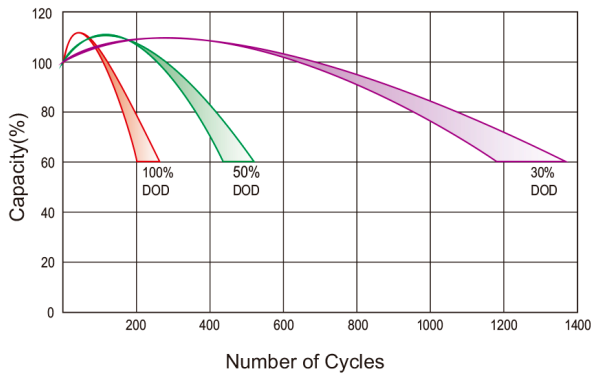
Discharge Characteristics Curve



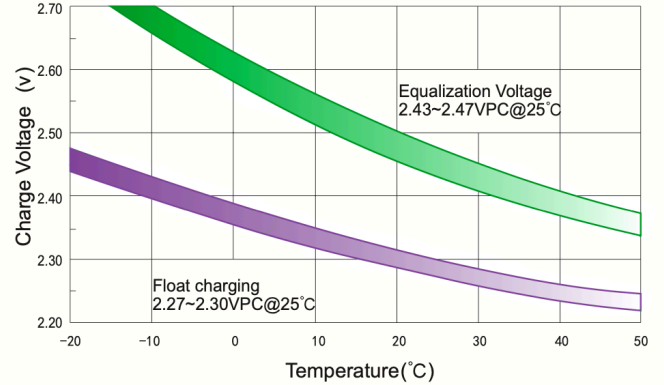
Charge Characteristic Curve For Standby Use



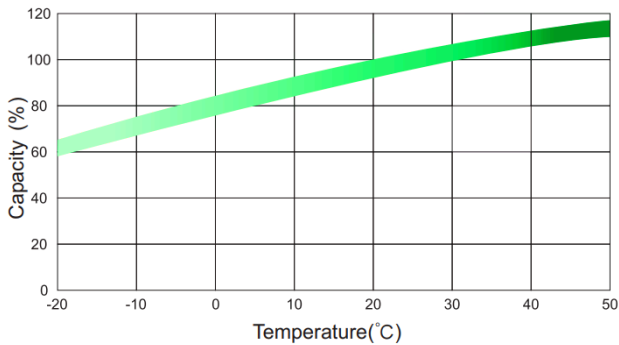
Cycle Life In Relation To Depth Of Discharge



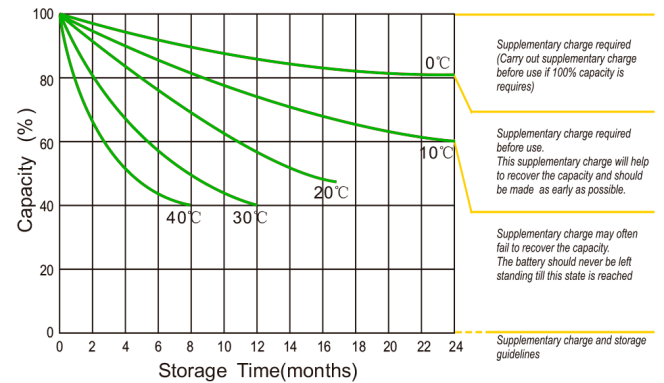
Relationship Between Charging Voltage And Temperature



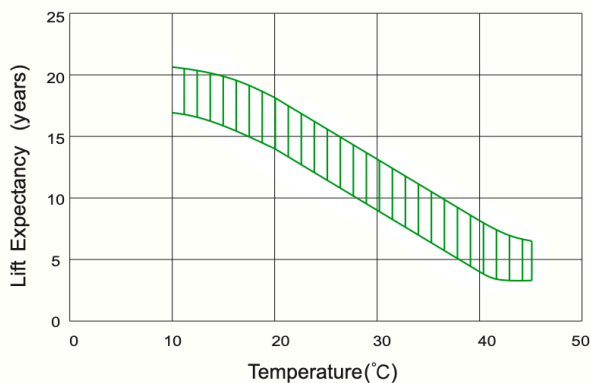
Temperature Effects On Capacity



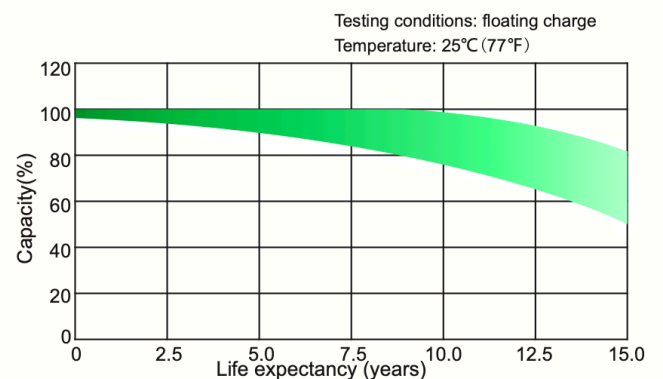
Storage Characteristics



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.