

### 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.

### Application:

- High Power
- Uninterrupted Power Supplies
- Datacenters
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Electric Tools

### Dimensions:

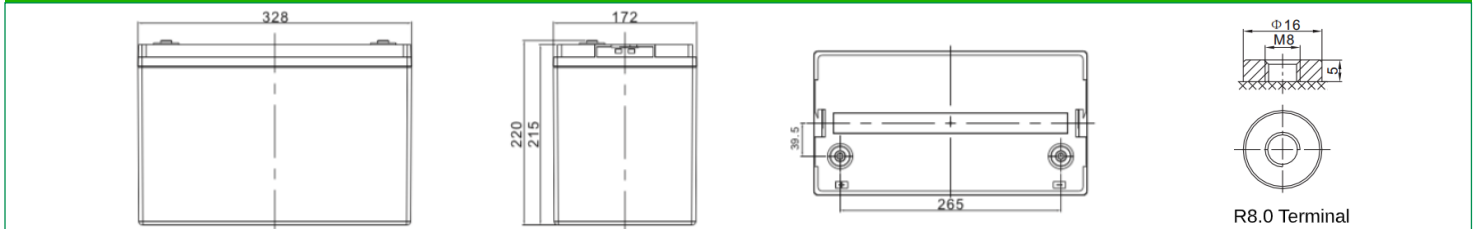
Length	328±1mm (12.9 inches)
Width	172±1mm (6.77 inches)
Height	215±1mm (8.46 inches)
Total Height	220±1mm (8.66 inches)

### Specification:

<b>Cells Per Unit</b>	6
<b>Voltage Per Unit</b>	12
<b>Nominal Capacity</b>	380W@15min-rate to 1.67V per cell @25°C
<b>Weight</b>	Approx. 30.5 Kg ±2%
<b>Internal Resistance</b>	Approx. 5.0 mΩ
<b>Terminal</b>	R8.0
<b>Max. Discharge Current</b>	1000A (5 sec)
<b>Design Life</b>	15 years floating Eurobat (20°C): >12 years Very Long Life
<b>Recommended Maximum Charging Current</b>	30.0 A
<b>Reference Capacity</b>	C20 100.0AH
<b>Standby Use Voltage</b>	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
<b>Cycle Use Voltage</b>	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
<b>Operating Temperature Range</b>	Discharge: -15°C~50°C Charge: -10°C~45°C Storage: -15°C~50°C
<b>Normal Operating Temperature Range</b>	25°C±5°C
<b>Self Discharge</b>	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.
<b>Container Material</b>	A.B.S. UL94-HB, UL94-V0 Optional.



### Drawing:



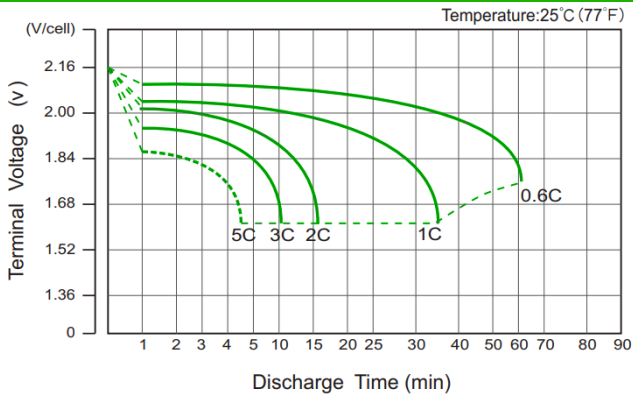
### Constant Current Discharge (CC, Unit: A) at 25°C (77°F)

F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	341.7	298.6	269.9	210.1	171.1	126.1	73.0	52.4
1.67V	310.1	273.8	249.4	195.9	160.8	119.3	69.6	50.2
1.70V	296.9	263.2	240.5	190.0	156.3	116.5	68.2	49.3
1.75V	274.1	245.2	225.4	179.7	148.5	111.5	65.9	47.7
1.80V	251.2	227.1	210.4	170.1	141.5	106.8	63.5	46.2
1.85V	215.6	193.4	178.3	146.2	122.8	94.5	57.4	42.1

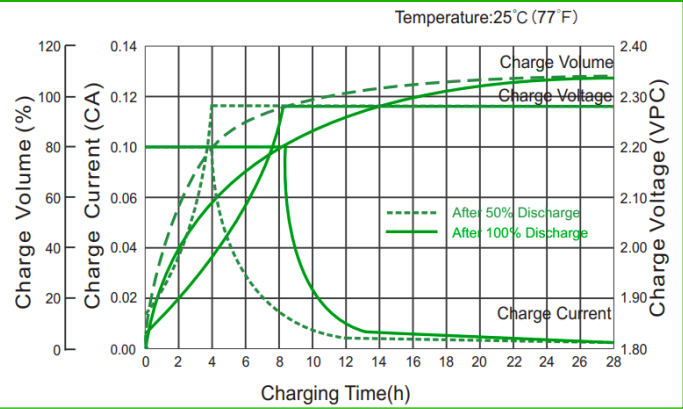
### Constant Power Discharge (CP, Unit: W/Battery) at 25°C (77°F)

F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	3767.4	3336.6	3045.6	2403.0	1972.8	1470.0	822.6	594.6
1.67V	3506.4	3130.2	2874.6	2280.0	1882.8	1410.0	791.4	574.8
1.70V	3391.2	3036.0	2794.2	2226.6	1842.6	1381.2	778.2	567.0
1.75V	3182.4	2869.2	2653.8	2130.6	1768.2	1335.6	757.2	551.4
1.80V	2962.2	2693.4	2506.2	2035.8	1701.6	1288.8	734.4	536.4
1.85V	2580.0	2326.2	2151.6	1769.4	1491.0	1149.6	668.4	493.2

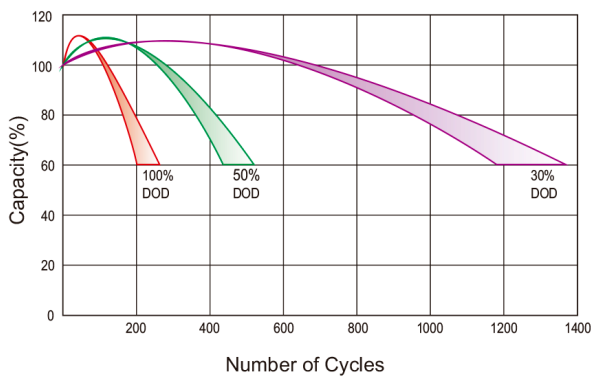
**Discharge Characteristics Curve**



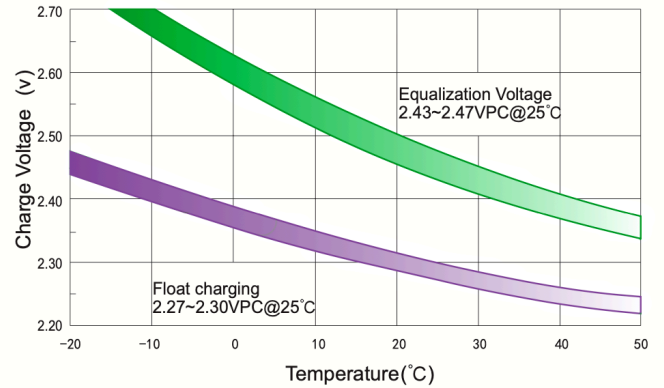
**Charge Characteristic Curve For Standby Use**



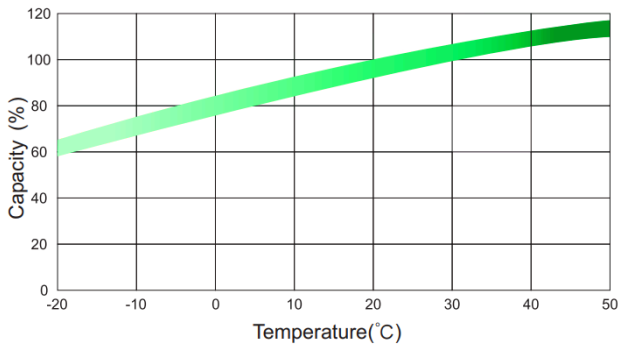
**Cycle Life In Relation To Depth Of Discharge**



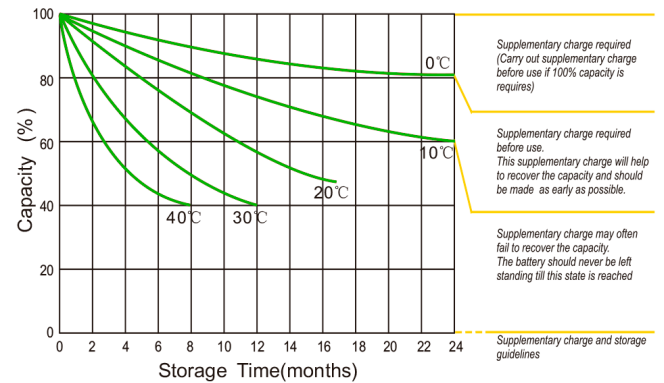
**Relationship Between Charging Voltage And Temperature**



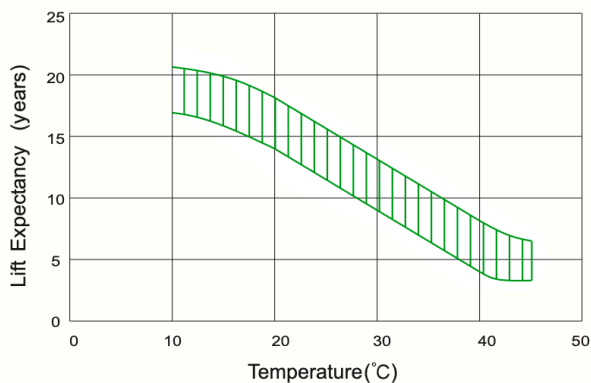
**Temperature Effects On Capacity**



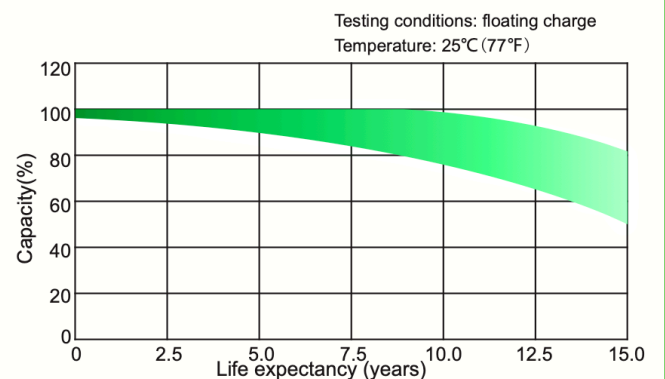
**Storage Characteristics**



**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.