

#### 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:

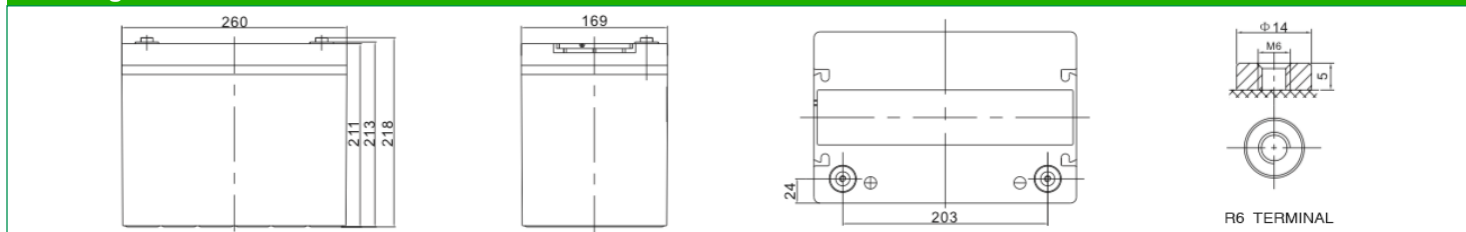
Length	260±1mm (10.2 inches)
Width	169±1mm (6.65 inches)
Height	211±1mm (8.31 inches)
Total Height	218±1mm (8.58 inches)

#### Specification:

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	280W@15min-rate to 1.67V per cell @25°C
Weight	Approx. 24.8 Kg ±2%
Internal Resistance	Approx. 6.0 mΩ
Terminal	R6
Max. Discharge Current	750A (5 sec)
Design Life	15 years floating Eurobat (20°C): >12 years Very Long Life
Recommended Maximum Charging Current	22.5 A
Reference Capacity	C20 75.0AH
Standby Use Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 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.



#### Drawing:



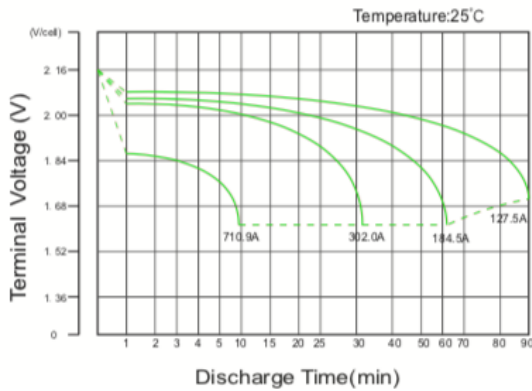
#### Constant Current Discharge (CC, Unit: A) at 25°C (77°F)

F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	265.1	227.0	204.2	162.2	130.3	95.5	54.9	40.7
1.67V	245.3	213.0	191.6	153.8	121.6	91.1	52.3	38.7
1.70V	235.1	205.5	184.7	149.0	116.9	88.5	50.8	37.6
1.75V	222.1	195.2	173.4	142.0	113.7	86.0	50.0	36.7
1.80V	208.9	184.9	162.1	134.9	110.3	83.3	49.0	35.8
1.85V	194.9	173.9	150.3	127.2	106.5	80.3	47.8	34.8

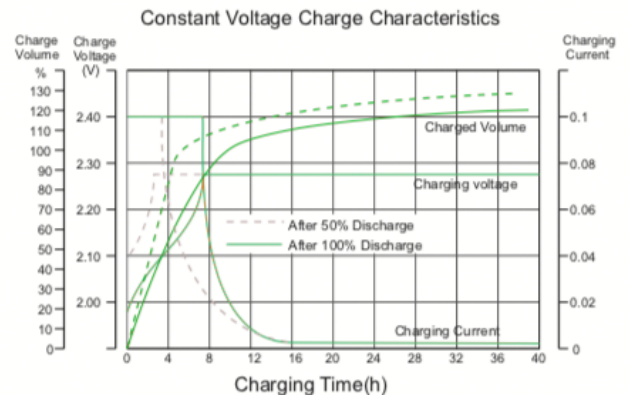
#### Constant Power Discharge (CP, Unit: W/Battery) at 25°C (77°F)

F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	2838.0	2466.0	2232.0	1782.0	1440.0	1056.0	609.6	453.0
1.67V	2652.0	2334.0	2112.0	1704.0	1356.0	1014.0	586.2	435.6
1.70V	2568.0	2280.0	2058.0	1674.0	1320.0	1002.0	576.0	427.2
1.75V	2460.0	2196.0	1962.0	1614.0	1296.0	984.0	574.2	423.0
1.80V	2346.0	2106.0	1860.0	1554.0	1278.0	966.0	570.6	418.8
1.85V	2232.0	2022.0	1758.0	1500.0	1260.0	948.0	568.2	414.6

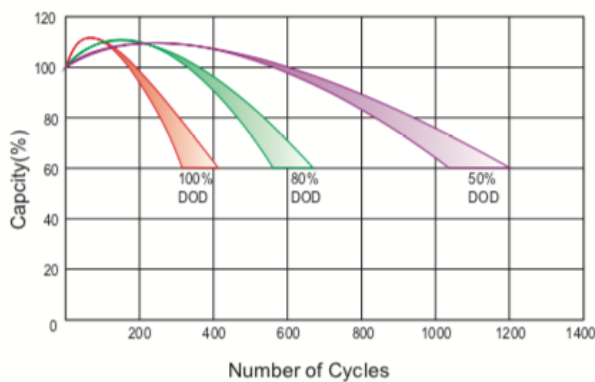
### Discharge Characteristics Curve



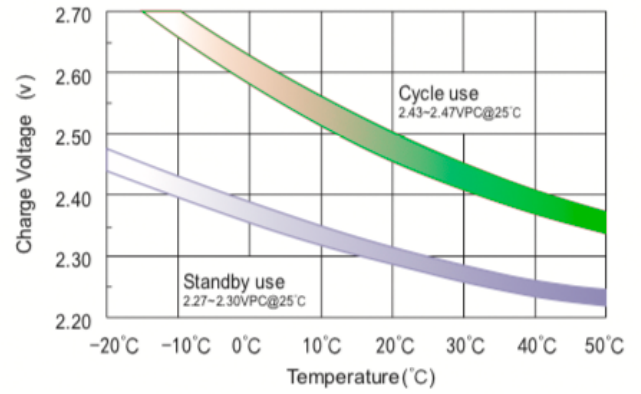
### Charge Characteristic Curve For Standby Use



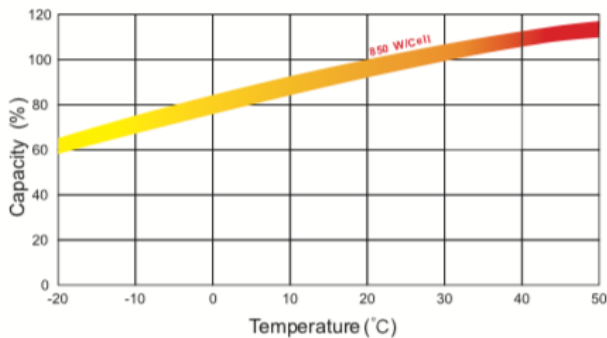
### Cycle Life In Relation To Depth Of Discharge (up to 15')



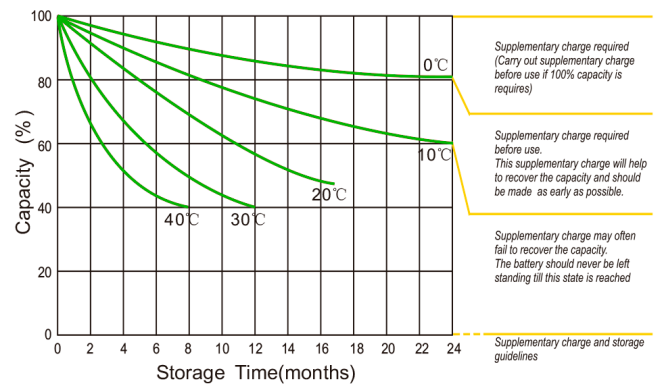
### Relationship Between Charging Voltage And Temperature



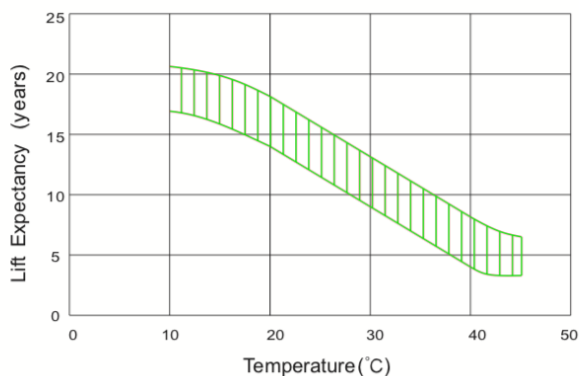
### Temperature Effects On Capacity



### Storage Characteristics



### Effect Of Temperature On Long Term Life



### Life Characteristics Of Standby Use

