



### LIVEN LVTJ Series

LVTJ Hybrid Gel series are manufactured with AGM separator (Absorbent Glass Material) and patented Gel electrolyte. The LVTJ series Valve Regulated Lead Acid (VRLA) is Hybrid Gel battery with 15 years floating design life. This battery it is ideal for standby or frequent cyclic discharge applications.

The number of deep discharge cycles is increase much compared with normal AGM, more than 400 cycles at 100% DOD.

### Applications:

- Telecommunications
- Power Station
- Uninterrupted Power Supplies
- Wind Power System
- Solar System

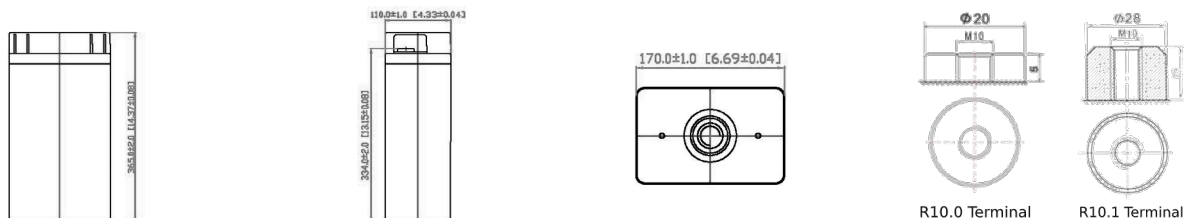
### Dimensions:

Length	170±1.5mm (6.69in)
Width	110±1.5mm (4.33in)
Height	334±1.5mm (13.15in)
Total Height	365±1.5mm (14.37in)

### Specifications:

Cells Per Unit	1
Voltage Per Unit	2V
Nominal Capacity	200Ah @10hour-rate to 1.80V per cell @25°C
Weight	Approx. 13.4Kg ±2% (29.54lbs)
Internal Resistance	Approx. 0.75mΩ
Terminal	R10.0 / R10.1
Design Life	15 years (Float charging) Eurobat (20°C): +12 years
Recommended Max. Charging Current	50.0A
Standby Use Voltage	2.25V~2.30V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	2.40V~2.50V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°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.

### Technical Drawings:



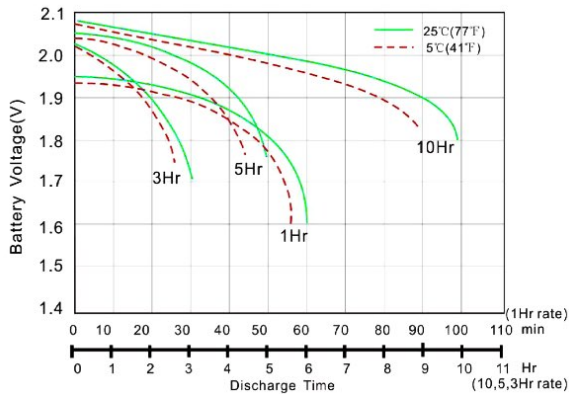
### Constant Current Discharge (CC, Unit: A) at 25°C (77°F)

F.V. / Time	10min	15min	30min	45min	1h	1.5h	2h	3h	5h	8h	10h	20h
1.75V	445.28	303.60	145.73	102.54	63.96	47.89	39.47	32.51	29.45	24.09	20.24	10.24
1.80V	440.00	300.00	144.00	101.32	63.20	47.32	39.00	32.12	29.10	23.80	20.00	10.12
1.85V	428.89	292.43	140.37	98.76	61.60	46.13	38.02	31.31	28.37	23.20	19.50	9.86

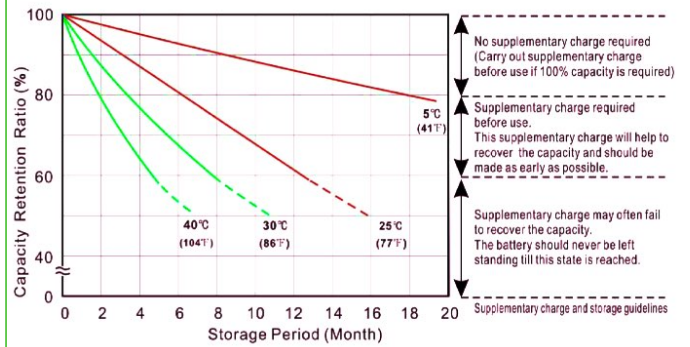
### Constant Power Discharge (CP, Unit: W/Battery) at 25°C (77°F)

F.V. / Time	10min	15min	30min	45min	1h	1.5h	2h	3h	5h	8h	10h	20h
1.75V	868.3	592.0	284.2	199.9	124.7	93.4	77.0	63.4	57.4	47.0	39.5	20.0
1.80V	858.0	585.0	280.8	197.6	123.2	92.3	76.1	62.6	56.7	46.4	39.0	19.7
1.85V	836.3	570.2	273.7	192.6	120.1	89.9	74.1	61.1	55.3	45.2	38.0	19.2

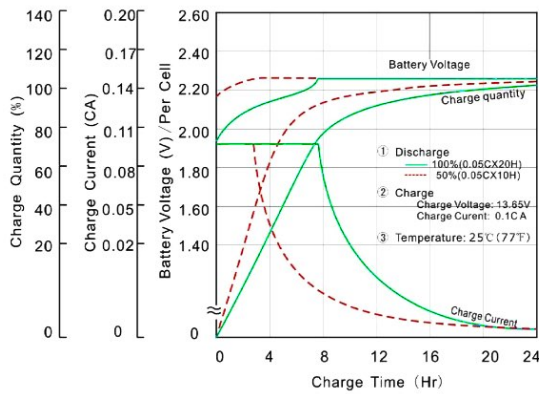
### Terminal Voltage (V) and Discharge Time



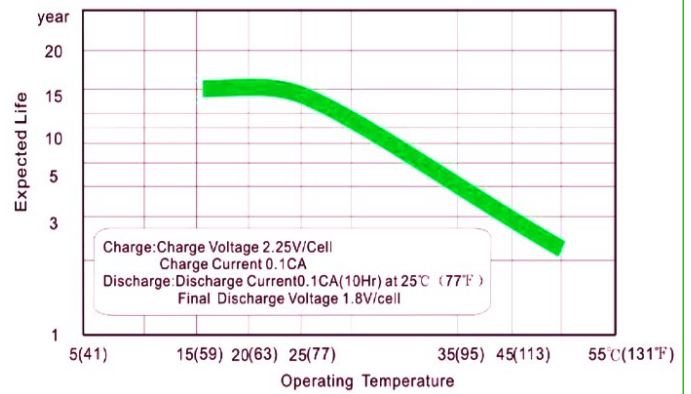
### Capacity Retention Characteristic



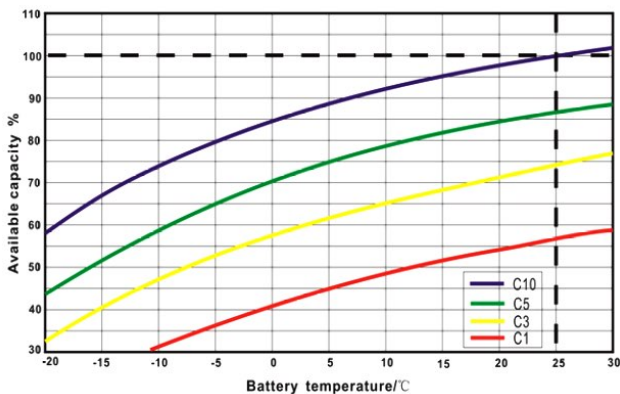
### Battery Voltage and Charge Time for Standby Use



### Tickle (or Float) Service Life



### General Relation of Capacity vs. Storage Time



### Cycle Service Life

