12V 150Ah

LVFJ150-12

GEL Battery

LIVEN LVFJ Series

LVFJ Hybrid Gel series are manufactured with AGM separator (Absorbent Glass Material) and patented Gel electrolyte. The LVFJ series Valve Regulated Lead Acid (VRLA) is Hybrid Gel battery with 12 years floating design life. This battery is ideal for standby or frequent cyclic discharge applications.

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

Applications:

- Telecommunications
- Uninterrupted Power Supplies
- Medical equipments
- Solar System
- Wind Power System
- Auto Control System

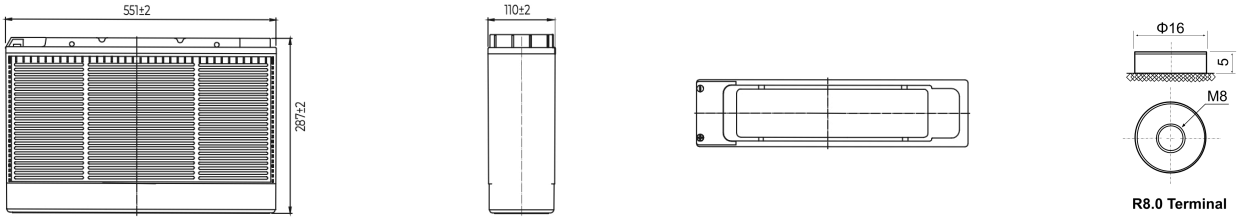
Dimensions:

Length	551±2mm (21.7in)
Width	110±2mm (4.33in)
Height	287±2mm (11.3in)
Total Height	287±2mm (11.3in)

Specifications:

Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	150Ah @10hour-rate to 1.80V per cell @25°C
Weight	Approx. 47.5Kg ±2% (104.7lbs)
Internal Resistance	Approx. 4.5mΩ
Terminal	R8.0
Max. Discharge Current	1050A (5sec)
Design Life	12 years floating Eurobat (20ºC): 10-12 years Long Life
Recommended Max. Charging Current	30.0A
Standby Use Voltage	13.5V~13.8V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.4V~14.7V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -15°C~50°C Charge: -10°C~50°C Storage: -20°C~50°C
Normal Operating Temperature Range	25°C±3°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:



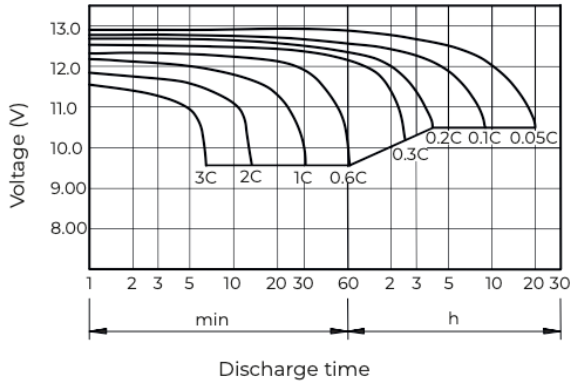
Constant Current Discharge (CC, Unit: A) at 25ºC (77ºF)

F.V. / Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	235	143	88.2	54.8	39.0	30.6	26.0	23.0	18.4	15.3	8.09
1.65V	230	140	86.9	54.5	38.8	30.4	25.9	22.8	18.3	15.2	8.08
1.70V	221	135	84.7	54.0	38.5	30.2	25.7	22.7	18.1	15.2	8.05
1.75V	214	132	82.0	53.2	38.3	30.0	25.5	22.5	18.0	15.1	8.01
1.80V	202	127	79.4	51.8	37.5	29.1	24.7	21.8	17.5	15.0	7.95

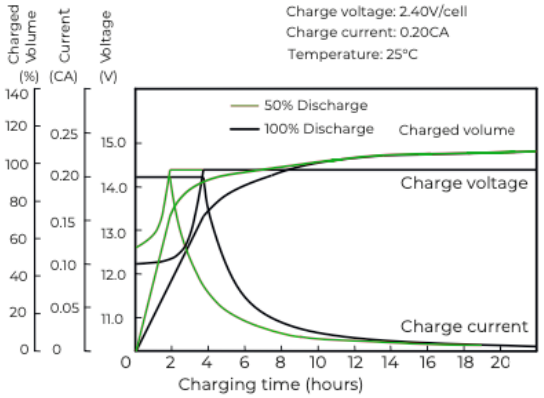
Constant Power Discharge (CP, Unit: W/Battery) at 25ºC (77ºF)

F.V. / Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	2582	1600	1005	635	459	360	307	271	218	182	97.1
1.65V	2521	1568	990	631	456	358	306	270	217	182	96.9
1.70V	2428	1520	965	625	453	355	304	268	215	181	96.6
1.75V	2345	1483	935	616	450	353	301	266	214	180	96.1
1.80V	2221	1429	905	600	441	342	292	258	207	179	95.4

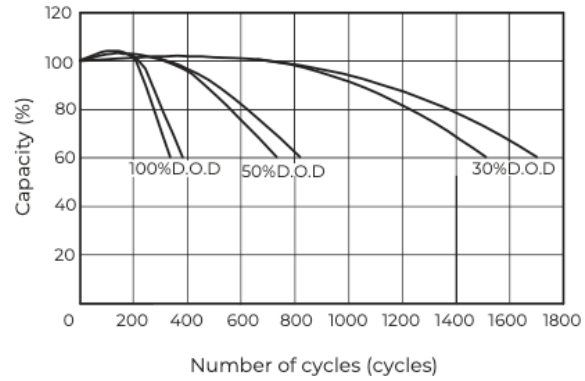
Discharge Characteristics Curve (25°C)



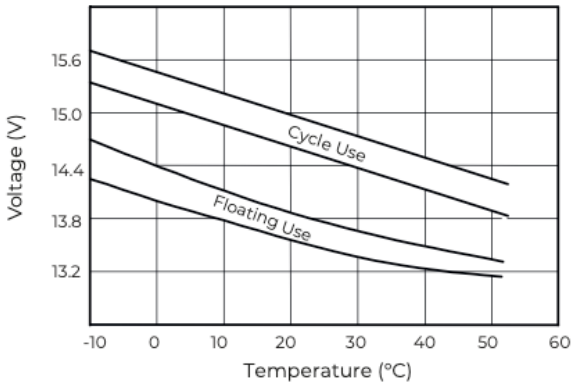
Charging Characteristics Curve (25°C)



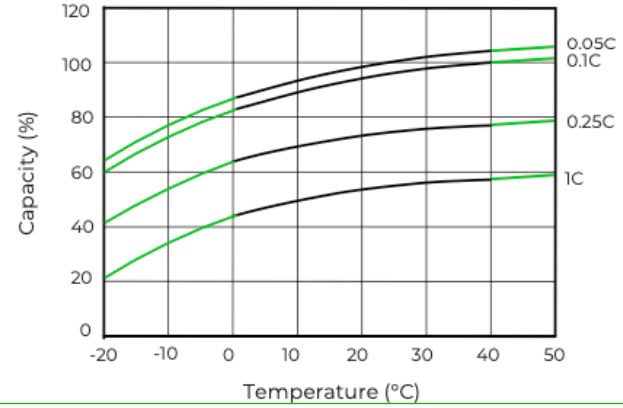
Cycle Life In Relation To Depth Of Discharge (25°C)



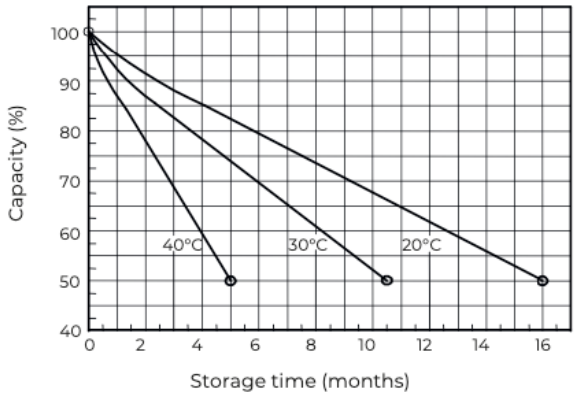
Relationship Between Charging Voltage And Temperature



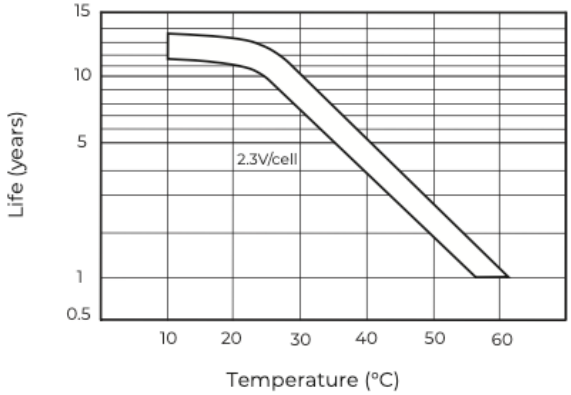
Temperature Effects On Capacity



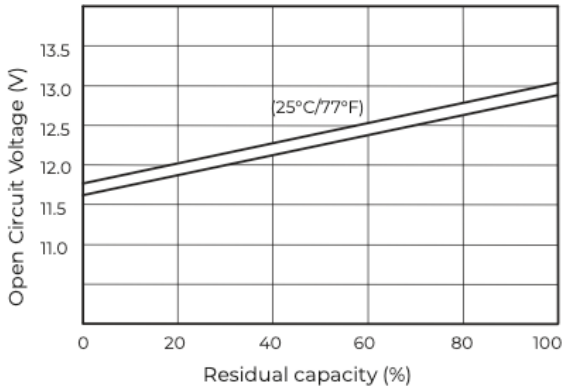
Self-discharge characteristics



Effect Of Temperature On Long Term Life



Relationship for OCV and capacity (25°C)



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(Note)All above information shall be changed without prior notice, LIVEN Battery reserves the right to explain and update the latest information.