



LIVEN LVJ Series - Storage-type Gelled Battery

- High performance, completely maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula, Gelled electrolyte formula and updated manufacturing technique
- Floating & standby use: up to 12 years
- Cycle use 1: Up to 350 cycles at 100% DOD
- Cycle use 2: Up to 1800 cycles at 15% DOD

Application:

- Telecommunications
- UPS / EPS
- DC Power Supply
- Solar System
- Wind Power System
- Auto Control System

Construction:

- ComponentRaw material
- PositiveLead dioxide
- NegativeLead
- ContainerABS
- CoverABS
- SealantEpoxy
- Safety valve Rubber
- TerminalCopper/Pb
- SeparatorFiber glass
- Electrolyte Gelled acid

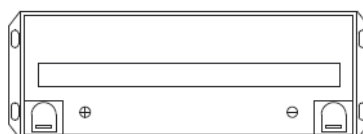
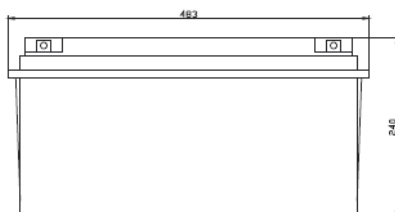


Specification:

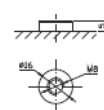
Cells Per Unit	6
Voltage Per Unit	12
Capacity	150Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 44.5 Kg (Tolerance $\pm 1.5\%$)
Max. Discharge Current	1500A (5 sec)
Internal Resistance	Approx. 4 m Ω
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C $\pm 5^\circ$ C
Float charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	45A
Equalization and Cycle Service	14.6 to 14.8 VDC/unit Average at 25°C
Self Discharge	LIVEN Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Terminal F5/F12
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Outer Dimensions:

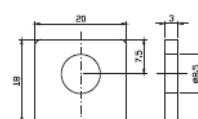
Unit: mm Dimension: 483(L) $\times$ 170(W) $\times$ 240(H)



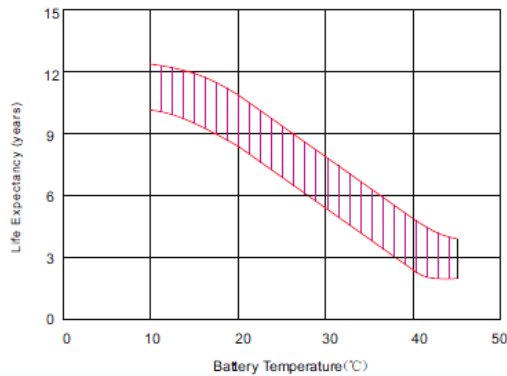
Terminal F12



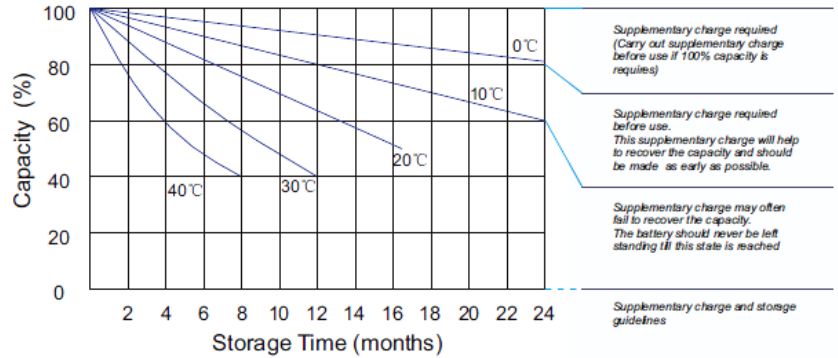
Terminal F5



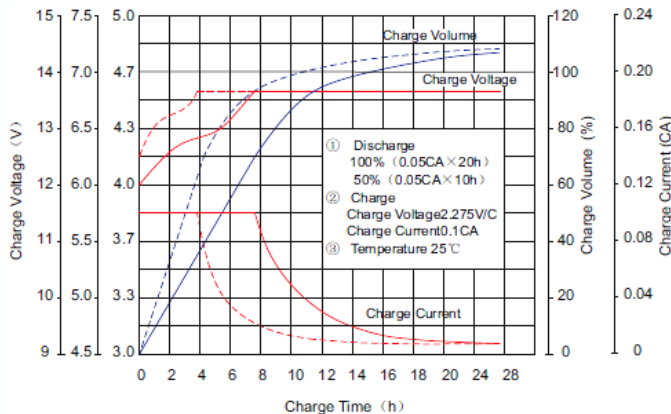
Effect of temperature on long term float life



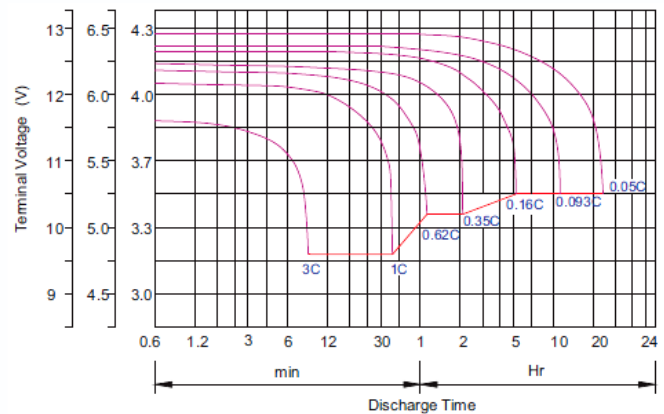
Storage characteristic



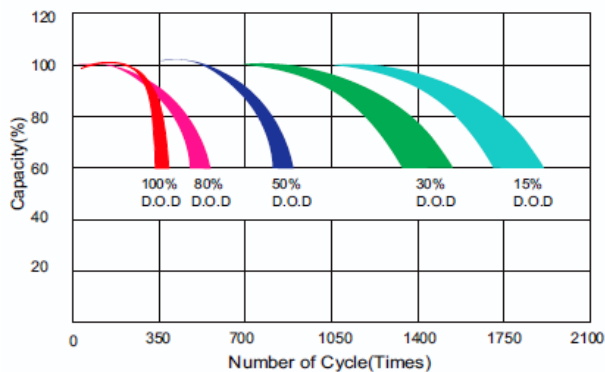
Charge characteristic Curve for standby use



Discharge characteristic Curve



Life characteristics of cyclic use



Cycle service

- ※ Avoid battery over discharge, especially battery series connection use.
- ※ Charged with recommend voltage, ensure battery can be full recharged.
- In general, recharge capacity should be 1.1-1.15 times discharge capacity.
- ※ Effect of temperature on cycle charge voltage: -4mV/°C/Cell.
- ※ There are a number of factors that will affect the length of cyclic service.
- The most significant are depth of discharge, ambient temperature, discharge rate, and the manner in which the battery is recharged.
- Generally speaking, the most important factors is depth of discharge.

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

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	434.3	324.3	261.2	147.7	91.75	57.81	39.28	31.68	26.29	17.32	15.61	8.26
10.0V	421.7	308.6	255.9	145.8	90.54	56.64	38.56	31.23	26.06	17.25	15.46	8.11
10.2V	409.2	297.7	251.9	143.6	89.67	56.04	38.21	30.91	25.89	17.10	15.30	7.95
10.5V	367.5	274.7	239.8	139.6	88.57	55.31	37.87	30.46	25.67	16.94	15.15	7.80
10.8V	331.7	250.5	221.0	135.0	87.34	54.85	37.43	29.41	25.55	16.87	15.01	7.72
11.1V	283.2	223.9	198.3	129.9	85.27	52.65	36.70	28.99	25.36	16.74	14.84	7.41

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

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	4492	3454	2874	1691	1063	677.4	462.5	379.1	315.0	207.4	187.2	99.54
10.0V	4403	3348	2827	1673	1054	669.1	455.6	373.8	312.2	206.6	185.7	97.81
10.2V	4353	3260	2796	1659	1047	664.4	453.6	370.3	310.3	205.0	184.1	96.00
10.5V	3963	3035	2667	1625	1041	656.0	449.9	365.3	307.8	203.3	182.2	94.19
10.8V	3609	2798	2465	1586	1027	651.1	444.9	353.0	306.4	202.4	180.4	93.28
11.1V	3170	2530	2219	1543	1012	626.7	437.4	347.9	305.3	201.0	178.5	89.94