



LIVEN LV Series

AGM (Absorbent Glass Material) technology with gas recombination. VRLA (Valve Regulated Lead Acid Battery). Maintenance-Free Sealed Lead Acid Battery. Battery with 5 years design life in float service.

Cycle use 1: Up to 260 cycles at 100% DOD.
Cycle use 2: Up to 500 cycles at 50% DOD.

Applications:

- Telecommunications
- Uninterrupted Power Supplies
- Medical equipments
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply

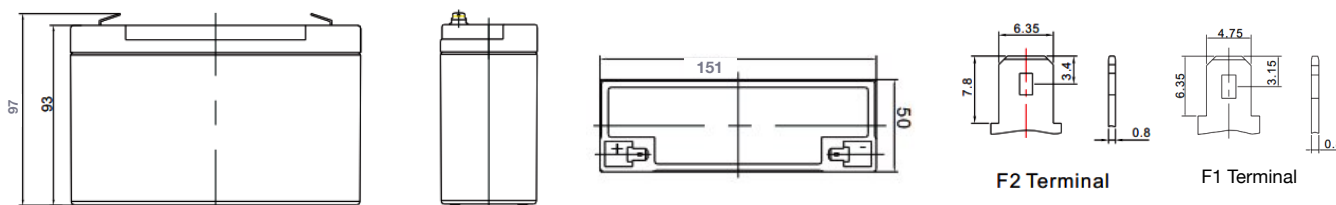
Dimensions:

Length	151±1.5mm (5.91in)
Width	50±1.5mm (1.96in)
Height	93±1.5mm (3.66in)
Total Height	97±1.5mm (3.90in)

Specifications:

Cells Per Unit	3
Voltage Per Unit	6V
Nominal Capacity	12Ah @20hour-rate to 1.75V per cell @25°C
Weight	Approx. 1.70Kg ±2% (3.75lbs)
Internal Resistance	Approx. 10mΩ
Terminal	F1 / F2 (optional)
Max. Discharge Current	120A (5sec)
Short Circuit Current	600A
Design Life	5 years (Float charging) Eurobat (20°C): 3-5 years
Recommended Maximum Charging Current	3.6A
Standby Use Voltage	6.75V~6.90V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	7.20V~7.50V @ 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.

Technical Drawings:



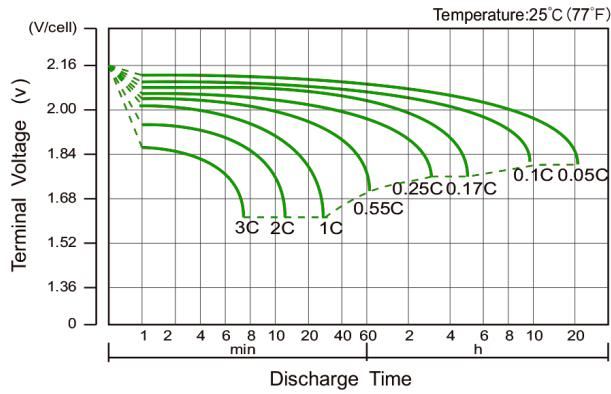
Constant Current Discharge (CC, Unit: A) at 25°C (77°F)

F.V./ Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	47.58	31.03	22.89	13.25	7.654	4.516	3.283	2.614	2.207	1.475	1.201	0.625
1.65V	45.86	30.10	22.29	12.96	7.513	4.450	3.239	2.582	2.181	1.460	1.190	0.620
1.70V	43.62	28.89	21.50	12.57	7.325	4.362	3.181	2.539	2.147	1.440	1.174	0.613
1.75V	40.75	27.32	20.48	12.07	7.078	4.246	3.104	2.481	2.102	1.414	1.154	0.604
1.80V	37.13	25.32	19.16	11.42	6.755	4.093	3.003	2.405	2.043	1.379	1.127	0.592
1.85V	32.67	22.81	17.49	10.58	6.340	3.894	2.870	2.306	1.964	1.332	1.092	0.577

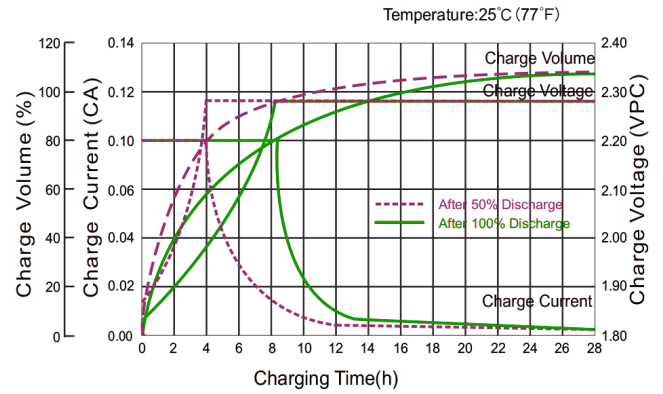
Constant Power Discharge (CP, Unit: W/Battery) at 25°C (77°F)

F.V./ Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	245.67	160.59	121.86	73.26	43.59	26.07	19.08	15.27	12.96	8.76	7.20	3.75
1.65V	243.09	159.96	121.17	72.72	43.23	25.86	18.96	15.18	12.87	8.70	7.14	3.72
1.70V	233.82	155.22	117.90	70.98	42.30	25.44	18.66	14.94	12.69	8.61	7.05	3.69
1.75V	222.36	149.43	113.91	68.82	41.07	24.87	18.30	14.67	12.48	8.46	6.93	3.63
1.80V	206.13	140.88	108.06	65.76	39.39	24.09	17.76	14.28	12.15	8.28	6.78	3.57
1.85V	184.62	129.18	100.05	61.56	37.23	23.04	17.04	13.74	11.73	8.01	6.57	3.48

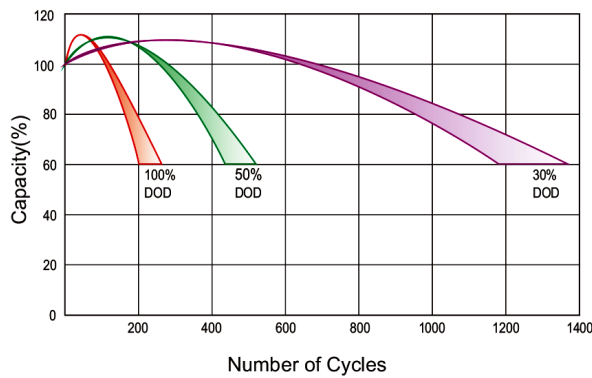
Discharge Characteristics Curve



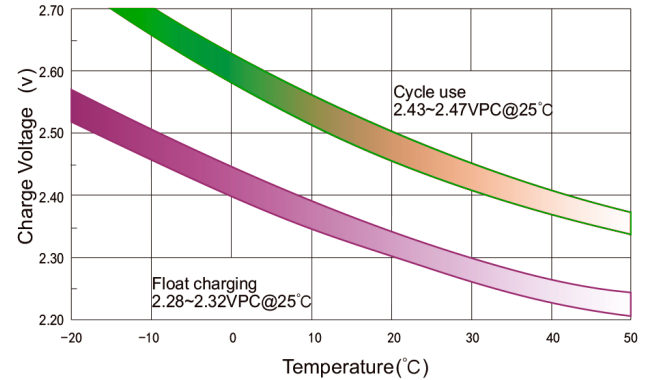
Charge Characteristic Curve For Standby Use



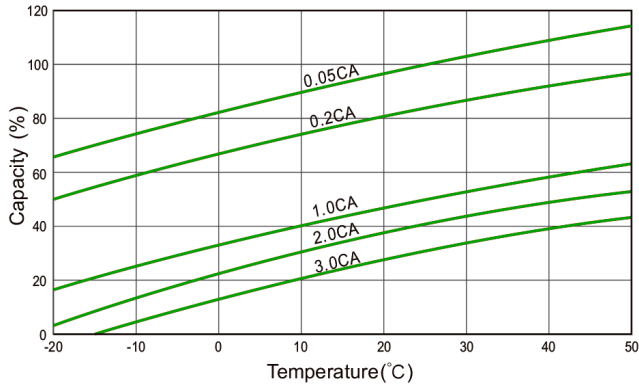
Cycle Life In Relation To Depth Of Discharge



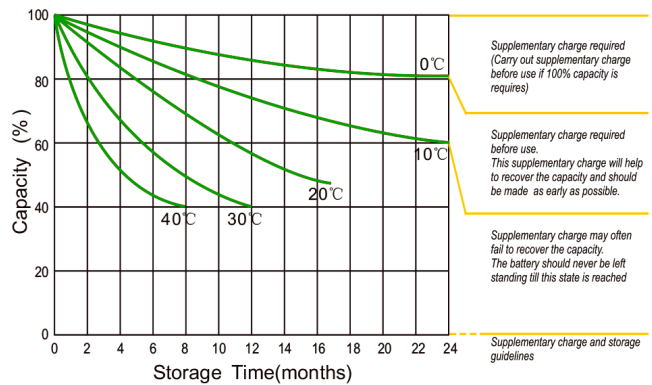
Relationship Between Charging Voltage And Temperature



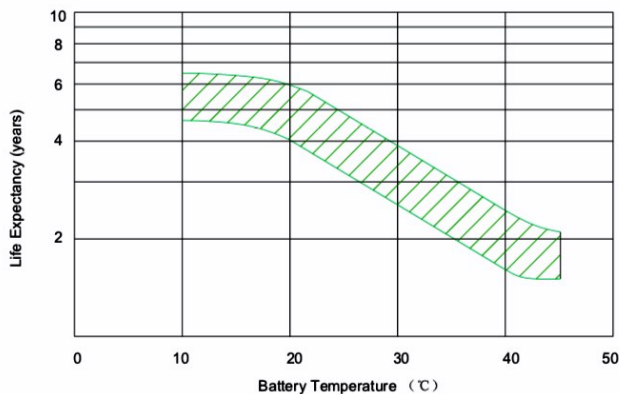
Temperature Effects On Capacity



Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use

