LIVEN BATTERY

12V 35AH

LEV35-12

LEV series VRLA battery

LIVEN LEV Series

AGM (Absorbent Glass Material) technology with gas recombination. VRLA (Valve Regulated Lead Acid Battery). LEV (Liven Electric Vehicle) series is specially designed for frequent discharge deep cycle application. Maintenance-Free Sealed Lead Acid Battery.

Cycle use 1: Up to 600 cycles at 80% DOD.
Cycle use 2: Up to 1200 cycles at 50% DOD.

Application:

- Electric Vehicle
- Golf cart
- Industrial equipment
- Floor machines
- Forklifts
- Aerial lifts and Robotics
- Marine
- RV
- No-idle solutions
- Mobility
- Medical equipment
- Outdoor application

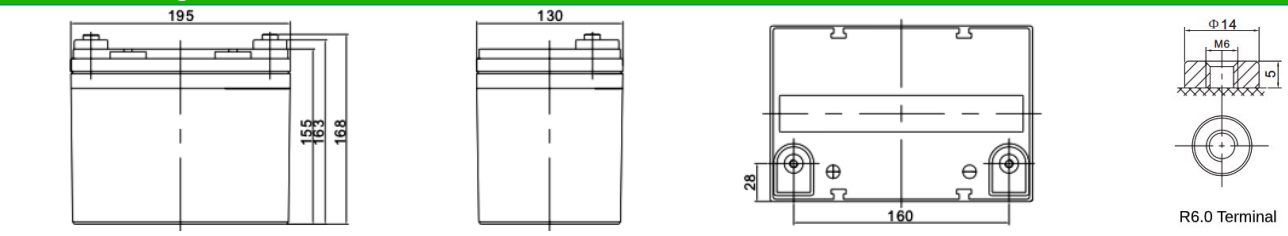
Dimensions:

Length	195±1.5mm (7.68in)
Width	130±1.5mm (5.12in)
Height	155±1.5mm (6.10in)
Total Height	168±1.5mm (6.61in)

Specification:

Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	35.0Ah @20hour-rate to 1.75V per cell @25°C
Weight	Approx.9.80Kg ±2% (21.60lbs)
Internal Resistance	Approx. 9.0mΩ
Terminal	R6.0
Max. Discharge Current	330A (5sec)
Cold Cranking Ampere (CCA)	230A
Recommended Maximum Charging Current	9.90A
Standby Use Voltage	13.6V~13.8V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6V~14.8V @ 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 Drawing:



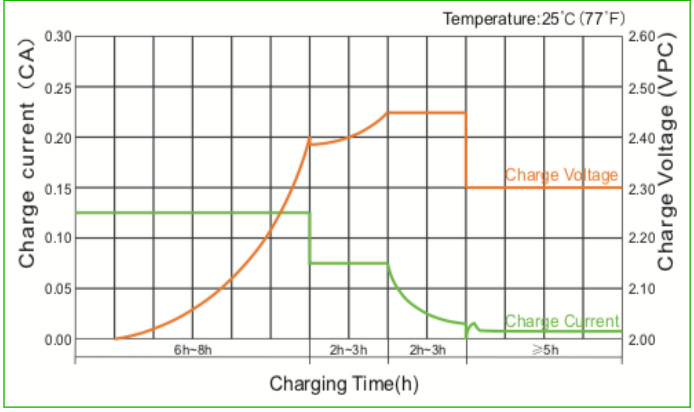
Constant Current Discharge (CC, Unit: A) at 25ºC (77ºF)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	111.0	83.76	63.02	36.86	20.36	12.02	9.32	7.32	6.23	4.19	3.48	1.82
1.65V	107.0	79.15	60.25	35.39	19.67	11.64	9.03	7.12	6.07	4.14	3.44	1.79
1.70V	101.8	72.87	56.43	33.82	19.03	11.26	8.78	6.93	5.91	4.08	3.39	1.77
1.75V	95.1	66.70	52.51	32.33	18.33	10.86	8.52	6.75	5.76	4.02	3.34	1.75
1.80V	86.62	60.38	48.49	30.90	17.63	10.48	8.26	6.56	5.62	3.95	3.30	1.73
1.85V	76.23	49.35	40.24	26.61	15.81	9.60	7.63	6.10	5.24	3.71	3.11	1.64

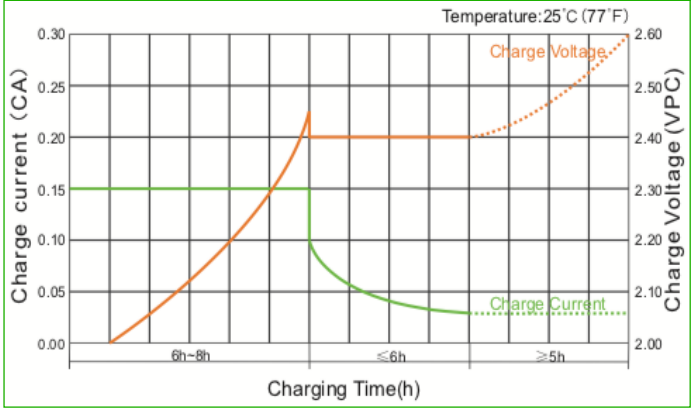
Constant Power Discharge (CP, Unit: W/Battery) at 25ºC (77ºF)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	1146.6	854.4	661.2	402.0	229.8	136.8	106.8	84.6	72.0	49.1	41.0	21.5
1.65V	1134.0	822.6	641.4	389.4	223.2	133.2	103.8	82.2	70.2	48.6	40.6	21.2
1.70V	1090.8	771.6	609.6	376.2	217.2	129.6	101.4	80.4	69.0	48.0	40.1	21.0
1.75V	1037.4	718.8	575.4	363.0	210.6	125.4	99.0	78.6	67.2	47.4	39.6	20.8
1.80V	961.8	661.8	538.8	351.0	203.4	121.8	96.0	76.8	66.0	46.7	39.1	20.6
1.85V	861.6	550.8	453.6	304.8	183.6	112.2	89.4	71.4	61.8	44.0	36.9	19.6

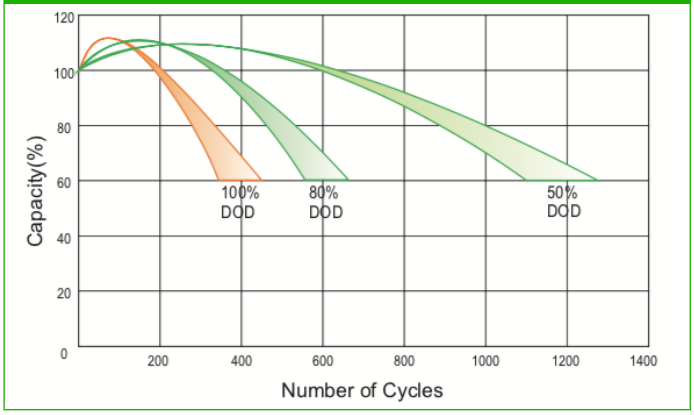
Charge Characteristic Curve For Cycle Use (IIUU)



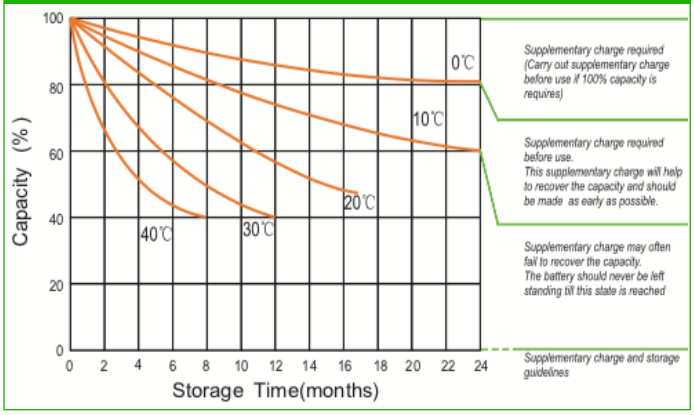
Charge Characteristic Curve For Cycle Use (IUI)



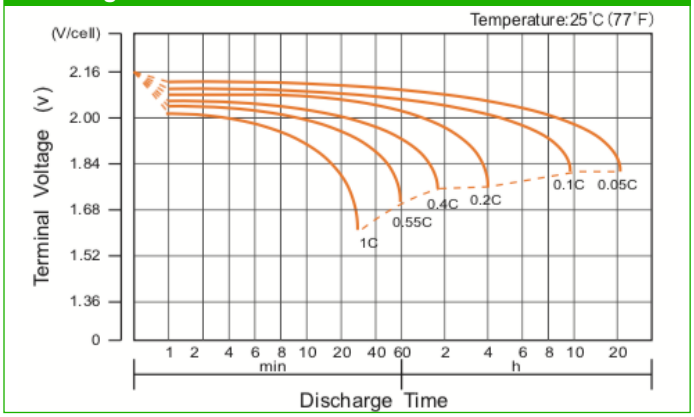
Cycle Life In Relation To Depth Of Discharge



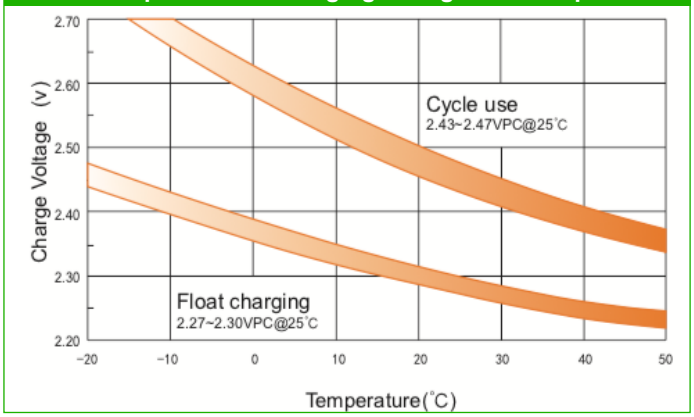
Storage Characteristics



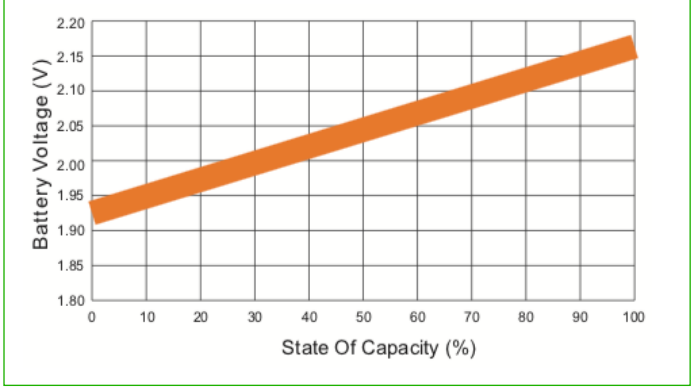
Discharge Characteristics Curve



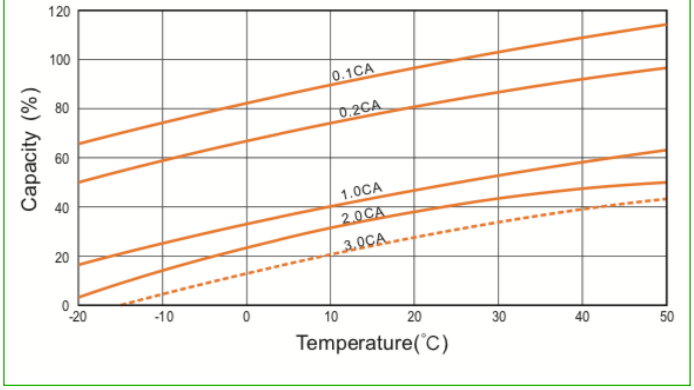
Relationship Between Charging Voltage And Temperature



Relationship of OCV And State of Charge (20ºC)



Temperature Effects On Capacity



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