12V 2.9Ah

LV2.9-12

AGM Battery

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	80±1.5mm (3.15in)
Width	56±1.5mm (2.20in)
Height	99±1.5mm (3.90in)
Total Height	105±1.5mm (4.13in)

Specifications:

Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	2.9Ah @20hour-rate to 1.75V per cell @25°C
Weight	Approx. 1.10Kg ±2% (2.43lbs)
Internal Resistance	Approx. 45mΩ
Terminal	F1
Max. Discharge Current	29A (5sec)
Short Circuit Current	166A
Design Life	5 years (Float charging) Eurobat (20ºC): 3-5 years
Recommended Maximum Charging Current	0.87A
Standby Use Voltage	13.5V~13.8V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.4V~15.0V @ 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:

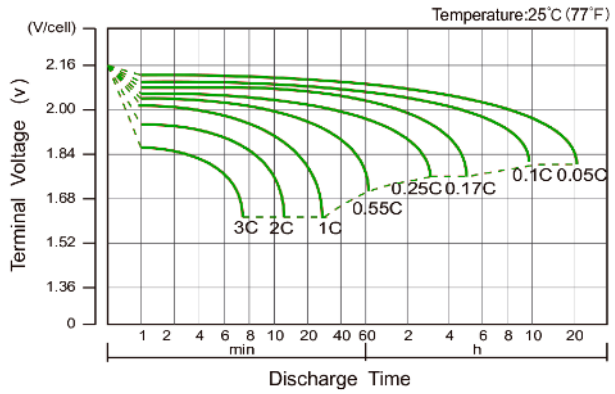
Constant Current Discharge (CC, Unit: A) at 25ºC (77ºF)

F.V./ Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	11.44	7.499	5.586	2.973	1.998	1.152	0.759	0.619	0.508	0.335	0.290	0.155
1.65V	11.02	7.312	5.406	2.935	1.971	1.129	0.745	0.610	0.504	0.334	0.287	0.154
1.70V	10.38	6.950	5.256	2.890	1.953	1.117	0.739	0.604	0.501	0.331	0.283	0.150
1.75V	9.328	6.499	4.958	2.811	1.929	1.103	0.732	0.595	0.496	0.328	0.281	0.146
1.80V	8.358	6.060	4.678	2.718	1.902	1.094	0.724	0.574	0.494	0.326	0.276	0.141
1.85V	7.312	5.556	4.315	2.614	1.857	1.050	0.710	0.566	0.492	0.324	0.272	0.138

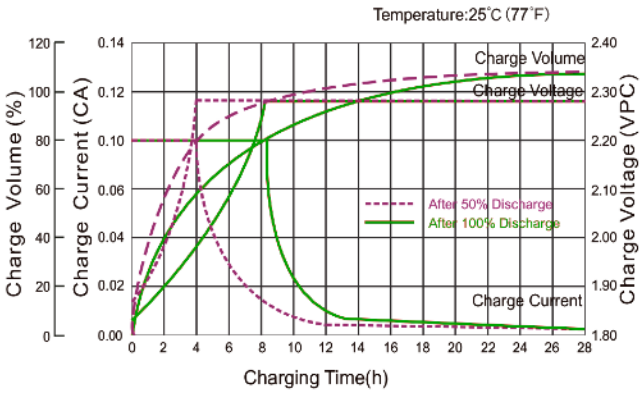
Constant Power Discharge (CP, Unit: W/Battery) at 25ºC (77ºF)

F.V./ Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	82.26	61.62	34.02	23.88	13.56	9.06	7.38	6.12	4.02	3.48	1.86	124.08
1.65V	80.52	60.78	33.66	23.52	13.38	8.94	7.32	6.06	4.02	3.42	1.86	120.78
1.70V	77.34	59.94	33.42	23.34	13.26	8.88	7.26	6.00	3.96	3.42	1.80	114.90
1.75V	74.16	56.82	32.70	23.04	13.14	8.82	7.14	5.94	3.96	3.36	1.74	104.88
1.80V	69.36	53.70	31.92	22.74	13.08	8.70	6.90	5.94	3.90	3.30	1.68	94.62
1.85V	64.56	50.58	31.08	22.26	12.60	8.52	6.78	5.88	3.90	3.30	1.68	83.46

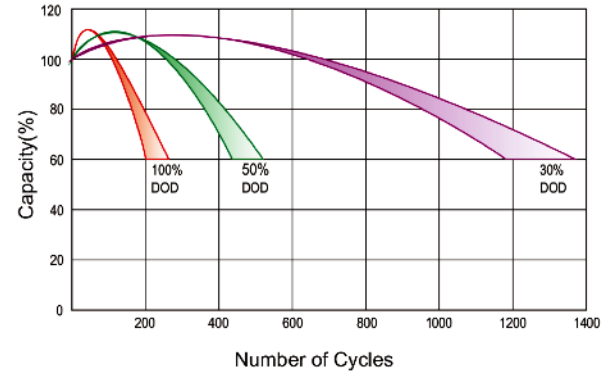
Discharge Characteristics Curve



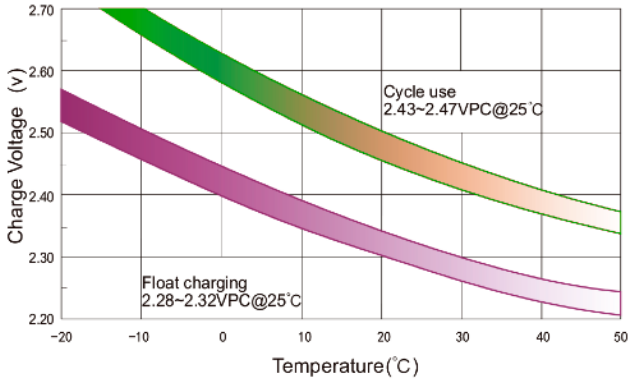
Charge Characteristic Curve For Standby Use



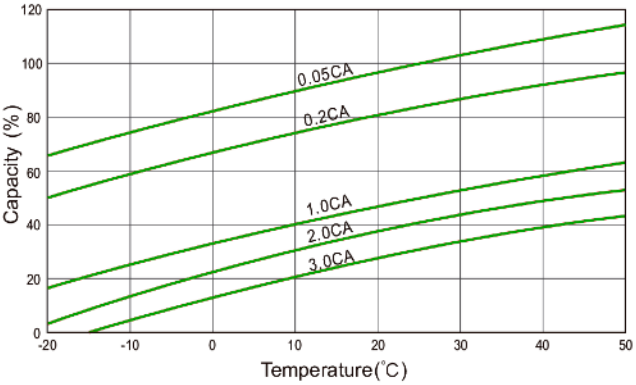
Cycle Life In Relation To Depth Of Discharge



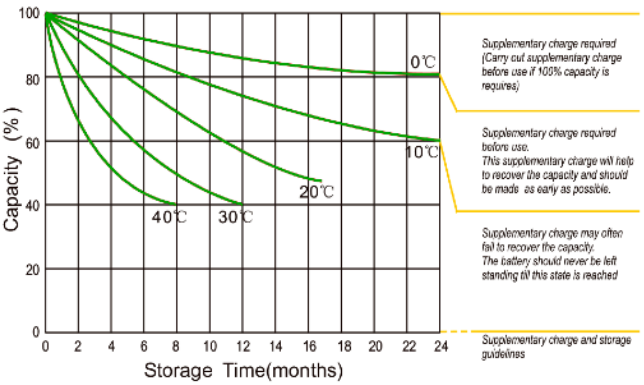
Relationship Between Charging Voltage And Temperature



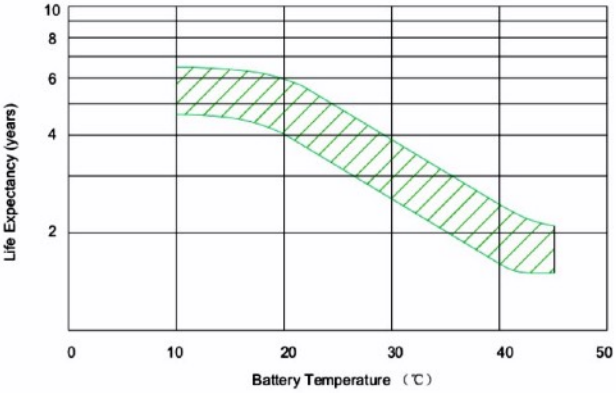
Temperature Effects On Capacity



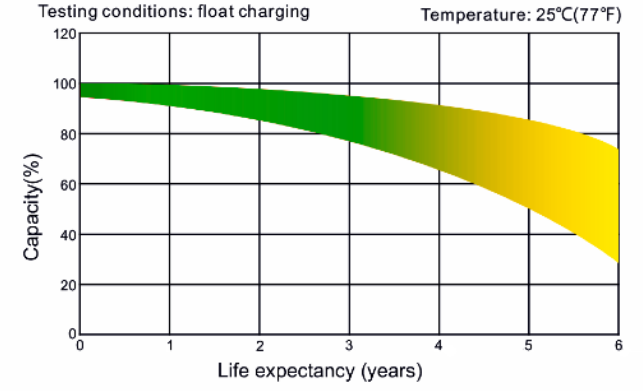
Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use



Living Energy