

ELIOS

EA12-100



12Volts
100Amps

Sealed
Rechargeable
Lead Acid

Battery



Reliable Power

Enjoy **Green** Life

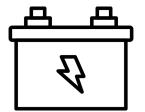
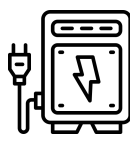
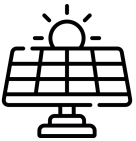
ELIOS | EA12-100



Rechargeable Lead Acid Battery Long-Lasting Power

Our new 12V 100Ah Deep Cycle Solar Battery sets the standard for exceptional performance and unparalleled quality, providing a long-lasting, efficient, and reliable power solution for a variety of applications, from off-grid setups to expansive commercial installations.

We take pride in using superior materials and strict quality control procedures to create high-quality batteries that meet the needs of our clients.



Applications

Solar System | UPS | Golf Cart | Light Tower | Portable Equipment
Vehicle Auxiliary Power | Security

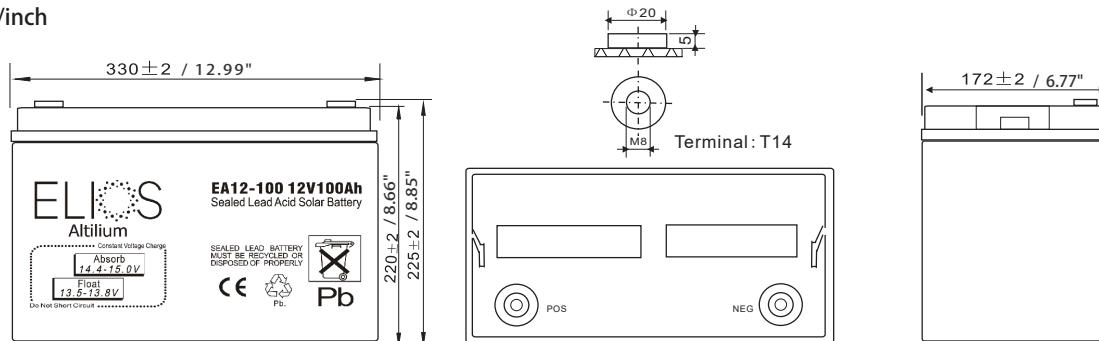
SPECIFICATIONS

Voltage Per Unit	12
Capacity	100Ah@C10 /105Ah@C20 /111Ah@C48 rate 1.80V per cell@25C
Weight	29.5kg / 65.03 lbs
Max. Discharge Current	800A (5sec)
Internal Resistance	3.5mΩ
Operating Temperature Range	Discharge: -40°C ~ 50°C Charge: -20°C ~ 50°C Storage: -20°C ~ 50°C
Normal Operating Temperature Range	25°C ± 5°C
Bulk/Absorb	14.70VDC @ 25°C
Float Voltage	13.50VDC @ 25°C
Equalize	16.20VDC @ 25°C* To be performed by professional only*
Max. Charging Current	25.0A
Self Discharge	The batteries can be stored for more than 6 months at 25°C. Please charge batteries before using. For high temperature, the time interval will be shorter.
Terminal	T14
Container Material	ABS(UL94-HB)



DIMENSIONS

Unit: mm/inch

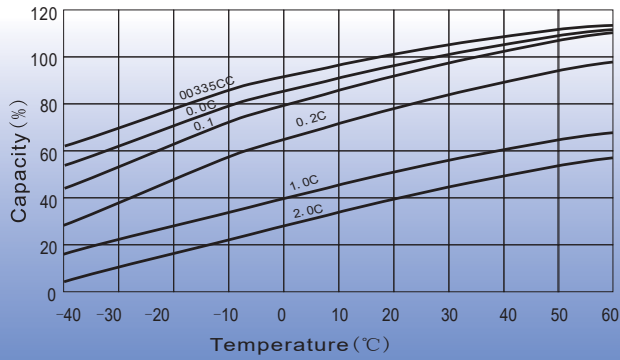


Constant Current Discharge Characteristics Unit:A(25 °C,77°F)

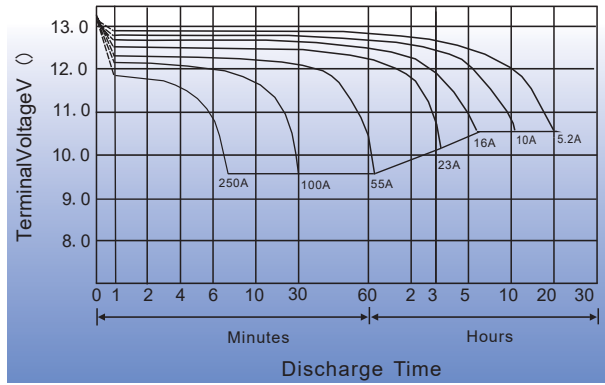
F.V/Time	5min	10min	15min	30min	45min	1h	3h	5h	10h	20h
1.60V/cell	307.1	210.8	152.1	91.9	67.3	56.3	25.5	17.3	10.3	5.38
1.65V/cell	294.6	191.0	148.8	90.3	66.5	55.8	25.4	17.2	10.2	5.30
1.70V/cell	267.4	184.3	146.7	89.6	65.7	55.3	25.3	17.1	10.1	5.25
1.75V/cell	241.5	169.7	142.6	88.9	63.6	55.0	25.0	17.0	10.0	5.20
1.80V/cell	219.6	157.6	132.3	83.6	63.0	52.3	23.8	16.3	8.8	4.75

All mentioned values are average values.

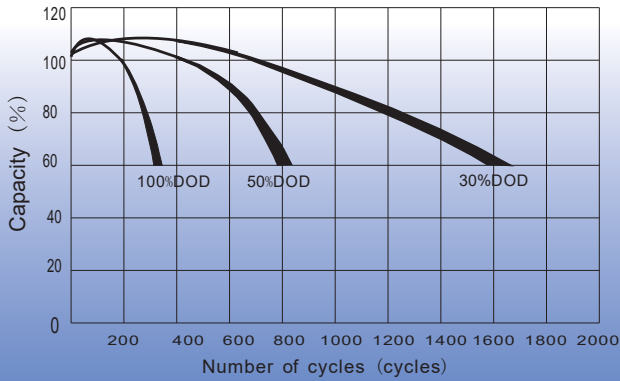
TEMPERATURE EFFECTS CURVE



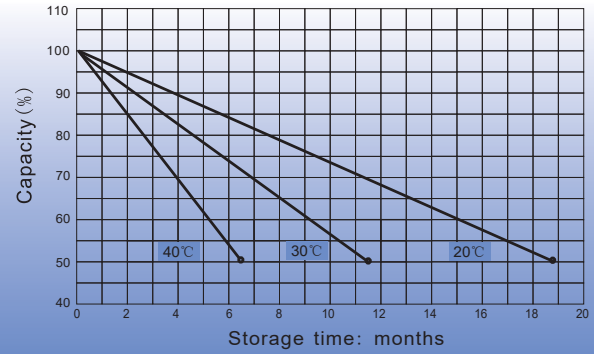
DISCHARGE TIME VS DISCHARGE CURRENT 25 (°C)



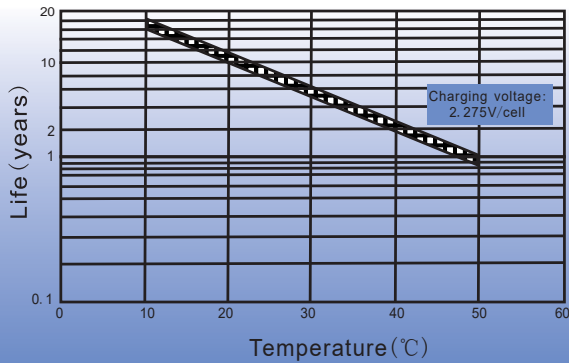
LIFE CHARACTERISTICS OF CYCLIC USE



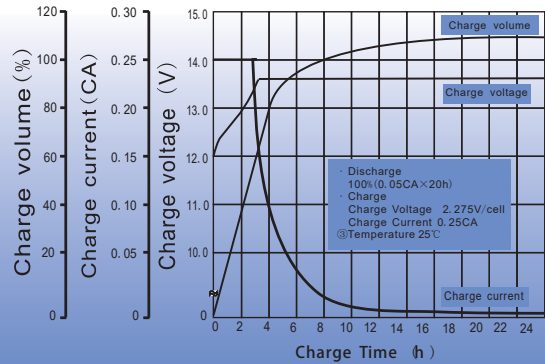
SELF-DISCHARGE CHARACTERISTIC



EFFECT OF TEMPERATURE ON LONG TERM FLOAT LIFE



CHARGE CHARACTERISTIC CURVE FOR STANDBY USE



Charging Procedures

Application	Charge Voltage (V/cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C	2.475	2.45~2.50	0.25C
Standby Use	25°C	2.275	2.25~2.30	

Charge the batteries at least once every 6 months, if they are stored at 25 °C.

Charging Method

Constant Voltage	14.7~15.0V, 5~11h, Max. Current 0.25CA
Constant Current	0.1CA×5h
Fast	0.25CA×1.7h

