

ECSG12-300 (12v 300Ah)
Specification

Nominal Voltage	12V	
Nominal Capacity(100 Hr)	300Ah	
Dimension	Length	520±1mm(20.47 inches)
	Width	268±1mm(10.55 inches)
	Containeriner Height	220±1mm(8.66 inches)
	Total Height (With terminal)	225±1mm(8.86 inches)
Approx Weight	Approx 70.2 kgs (154.76lbs)	
Design life	12 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	300.0Ah/30.00A	(100hr, 1.75V/Cell, 25 °C/77°F)
	267.4Ah/13.37A	(20hr, 1.75V/Cell, 25 °C/77°F)
	250.0Ah/25.0A	(10hr, 1.80V/Cell, 25 °C/77°F)
	220.0Ah/44.0A	(5hr, 1.75V/Cell, 25 °C/77°F)
	159.5Ah/159.5A	(1hr, 1.60V/Cell, 25 °C/77°F)
Max. Discharge Current	2000A(5s)	
Internal Resistance	Appro≤2.6 mΩ	
Operating Temp. Range	Discharge: -30 °C~60 °C	
	Charge: -30 °C~60 °C	
	Storage: -30 °C~60 °C	
Nominal Operating Temp. Range	25±3 °C(77±5°F)	
Cycle Use	Initial Charging Current Less than 50 A. Voltage 14.4V-14.9V at 25 °C(77°F) Temp. Coefficient-20mV/C	
	No limit on Intital Charging Current Voltage 13.6V-13.8V at 25 °C(77°F) Temp. Coefficient-20mV/C	
Standby Use	40 °C(104°F) 108%	
Capacity affected by Temperature	25 °C(77°F) 100%	
	0 °C(32°F) 90%	
	ECSG series batteries may be stored for up to 6 months at 25 °C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	


Application

- All purpose
- Solar or Wind Power System
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Railway signal
- Aircraft signal
- Alarm and security system
- Electronic apparatus & equipment
- Communication power supply

Constant Current Discharge (Amperes) at 25 °C (77°F)

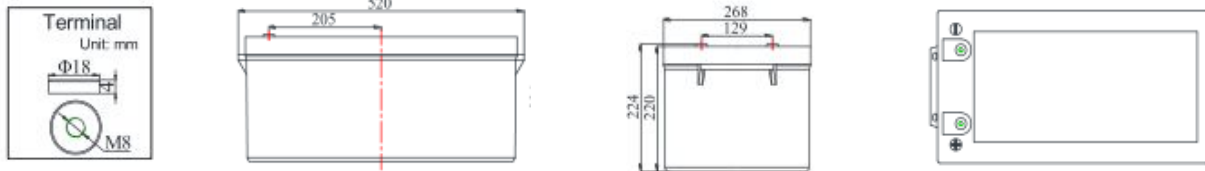
F.V/Time	15 min	30min	45min	1h	2h	3h	5h	6h	8h	10h	20h	100h
1.60V	451.3	265.6	201.1	159.7	94.3	69.3	46.2	40.4	31.8	26.0	13.86	3.15
1.67V	426.3	252.1	193.4	154.9	90.5	66.4	46.2	39.5	31.8	26.0	13.76	3.16
1.70V	400.3	244.4	186.7	149.2	88.5	65.4	45.2	39.5	30.8	26.0	13.57	3.15
1.75V	375.0	233.7	177.9	142.3	85.6	63.5	44.2	38.5	30.8	25.0	13.37	3.00
1.80V	351.8	224.9	172.1	137.5	82.7	61.5	43.3	37.5	29.8	25.0	13.26	1.62

Constant Power Discharge (Watts) at 25 °C (77°F)

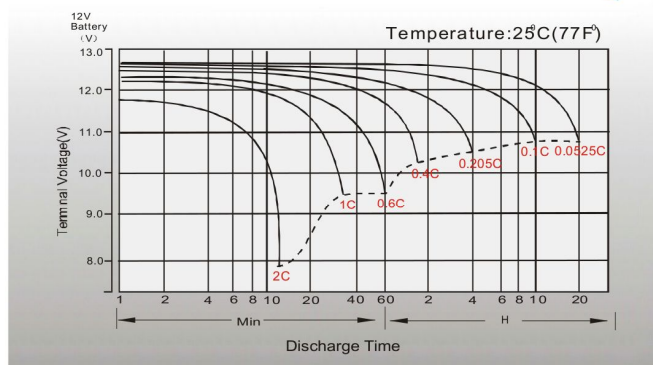
F.V/Time	15 min	30min	45min	1h	2h	3h	5h	6h	8h	10h	20h	100h
1.60V	862.8	528.1	382.8	305.9	177.9	131.8	89.5	77.9	61.6	51.0	26.9	6.16
1.67V	825.5	494.9	369.0	297.9	173.0	127.8	88.4	76.9	61.5	50.9	26.9	6.16
1.70V	769.3	483.7	357.7	287.5	169.2	125.0	86.5	76.0	60.6	50.0	26.9	6.03
1.75V	721.8	460.4	343.1	276.8	165.3	123.0	85.5	75.0	59.6	50.0	26.9	6.05
1.80V	677.5	442.1	331.5	268.1	159.5	119.2	83.6	73.0	59.6	49.0	25.9	6.06

ECSG12-300 (12v 300Ah)

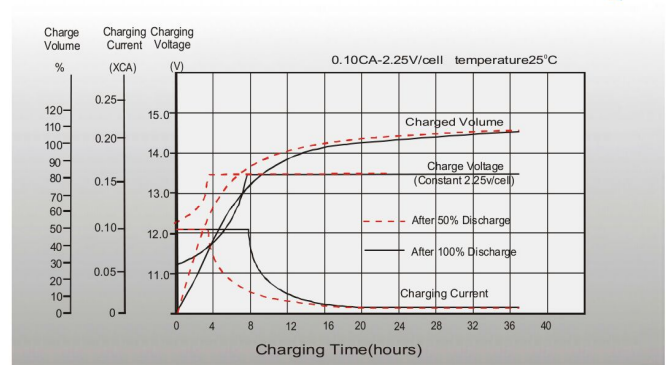
Dimensions



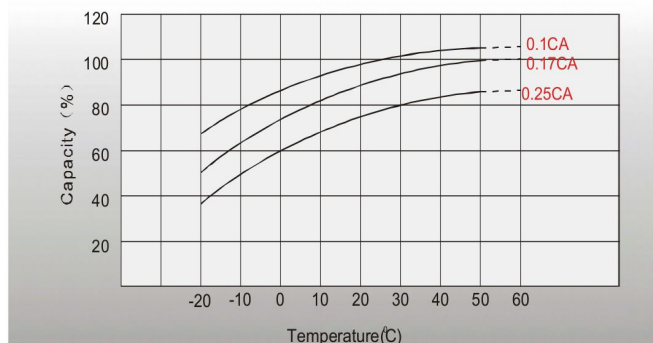
Discharge Characteristics



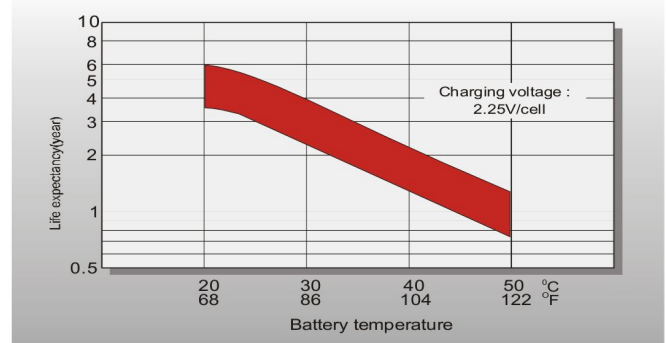
Float Charging Characteristics



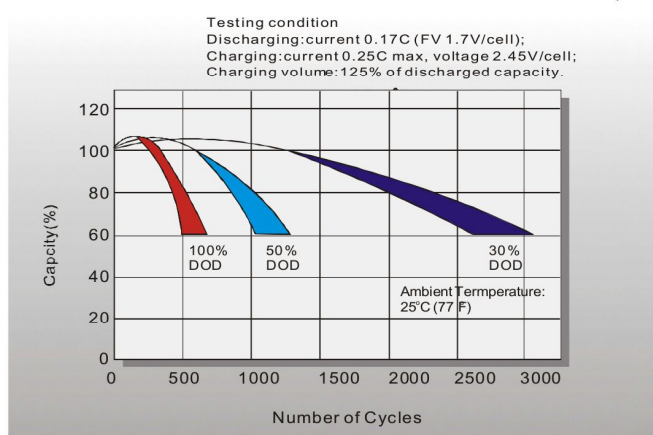
Temperature Effects in Relation to Battery Capacity



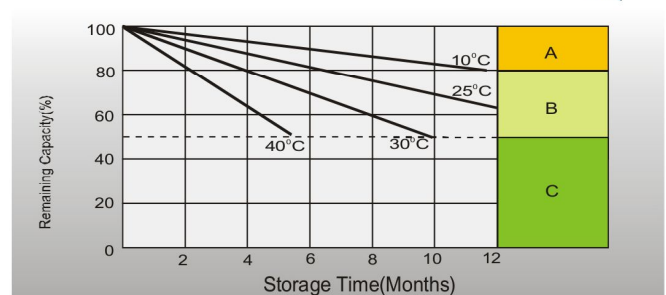
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self-discharge Characteristics



- A** No supplementary charge required.
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
3. Charged for 8~10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

Specifications subject to change without prior notice.