

ECSG12-180 (12v 180Ah)
Specification

Nominal Voltage	12V	
Nominal Capacity(100 Hr)	180Ah	
Dimension	Length	484±1mm(19.06 inches)
	Width	171±1mm(6.73 inches)
	Containeriner Height	241±1mm(9.49 inches)
	Total Height (With terminal)	241±1mm(9.49 inches)
	Approx Weight	Approx. 43.7 kgs (96.34lbs)
Design life	12 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	180.0Ah/1.80A	(100hr, 1.75V/Cell, 25 °C/77°F)
	160.6Ah/8.03A	(20hr, 1.75V/Cell, 25 °C/77°F)
	150.0Ah/15.0A	(10hr, 1.80V/Cell, 25 °C/77°F)
	132.0Ah/26.4A	(5hr, 1.75V/Cell, 25 °C/77°F)
	95.7Ah/95.7A	(1hr, 1.60V/Cell, 25 °C/77°F)
Max. Discharge Current	1500A(5s)	
Internal Resistance	Appro≤5 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 30 A. Voltage 14.4V-14.9V at 25 °C(77°F) Temp. Coefficient-20mV/C	
Standby Use	No limit on Intital Charging Current Voltage 13.6V-13.8V at 25 °C(77°F) Temp. Coefficient-20mV/C	
Capacity affected by Temperature	40 °C(104°F)	108%
	25 °C(77°F)	100%
	0 °C(32°F)	90%
Self Discharge	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)

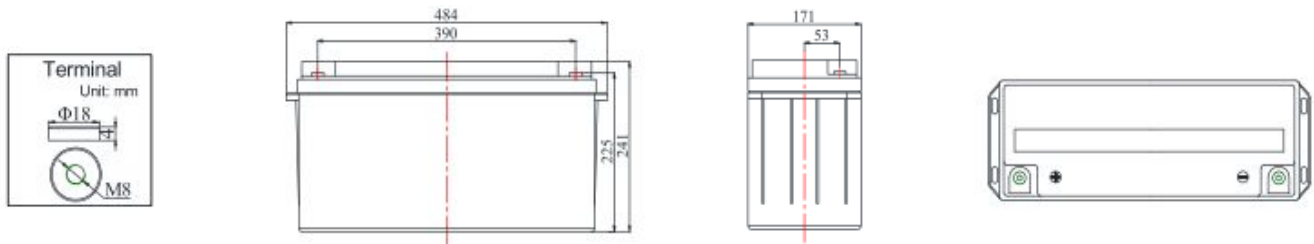
F.V/Time	15 min	30min	45min	1h	2h	3h	5h	6h	8h	10h	20h	100h
1.60V	270.8	159.4	120.7	95.8	56.6	41.6	27.7	24.3	19.1	15.6	8.31	1.89
1.67V	255.8	151.3	116.1	93.0	54.3	39.8	27.7	23.7	19.1	15.6	8.26	1.90
1.70V	240.2	146.7	112.0	89.5	53.1	39.3	27.1	23.7	18.5	15.6	8.14	1.89
1.75V	225.0	140.2	106.7	85.4	51.3	38.1	26.5	23.1	18.5	15.0	8.02	1.80
1.80V	211.1	135.0	103.2	82.5	49.6	36.9	26.0	22.5	17.9	15.0	7.96	0.97

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

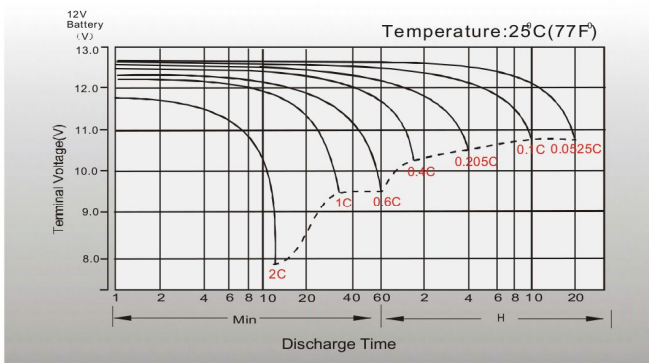
F.V/Time	15 min	30min	45min	1h	2h	3h	5h	6h	8h	10h	20h	100h
1.60V	517.7	316.9	229.7	183.5	106.8	79.1	53.7	46.7	36.9	30.6	16.2	3.70
1.67V	495.3	296.9	221.4	178.7	103.8	76.7	53.0	46.1	36.9	30.6	16.1	3.70
1.70V	461.6	290.2	214.6	172.5	101.6	75.0	51.9	45.6	36.4	30.0	16.2	3.62
1.75V	433.1	276.2	205.9	166.1	99.2	73.8	51.3	45.0	35.8	30.0	16.1	3.63
1.80V	406.5	265.2	198.9	160.9	95.7	71.5	50.2	43.8	35.7	29.4	15.6	3.64

ECSG12-180 (12v 180Ah)

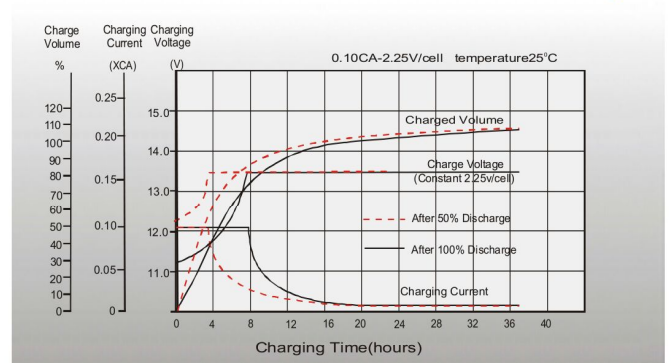
Dimensions



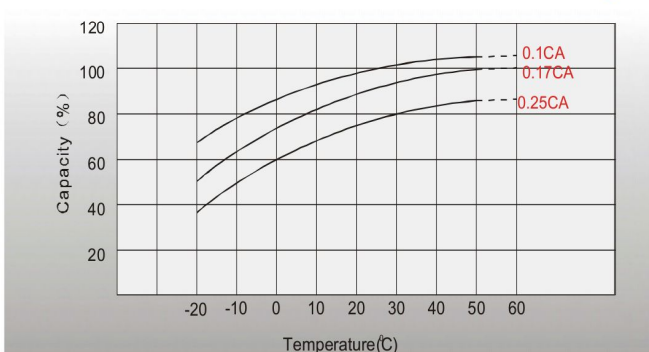
Discharge Characteristics



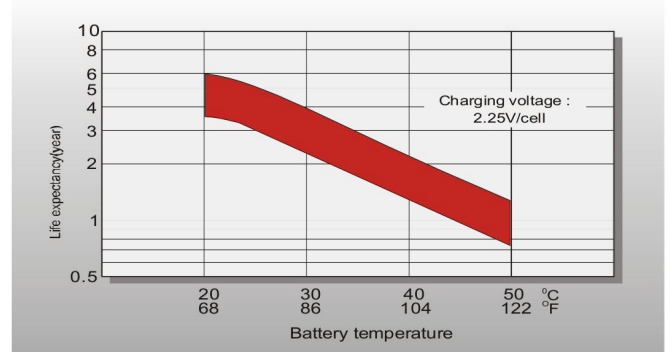
Float Charging Characteristics



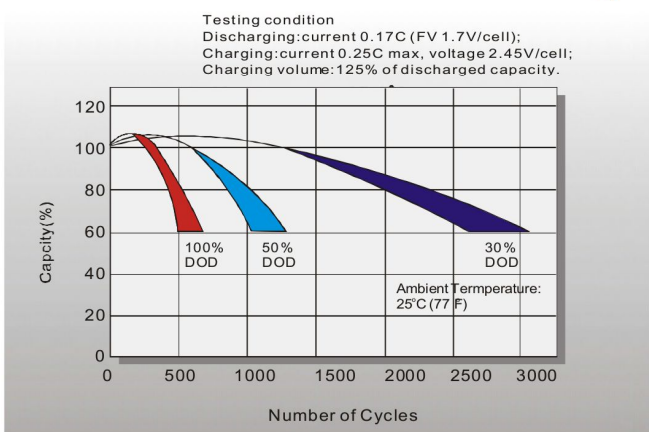
Temperature Effects in Relation to Battery Capacity



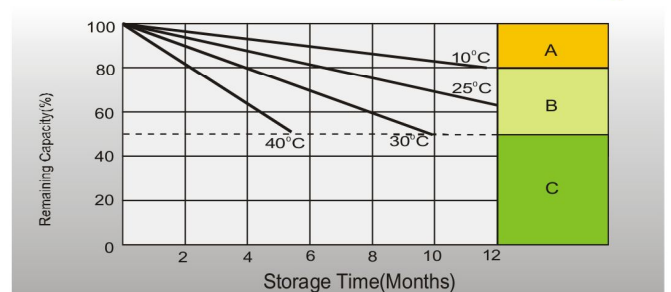
Effect of Temperature on Long Term Float Life



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.