

### Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	150.0AH	
Dimension	Length	485±3mm (19.09 inches)
	Width	170±2mm (6.69 inches)
	Container Height	238.5±3mm (9.39 inches)
	Total Height (with Terminal)	238.5±3mm (9.39 inches)
Approx Weight	Approx 48.2 Kg (103.3 lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	160.5 AH/8.03A	(20hr, 1.80V/cell, 25°C/77°F)
	150.0 AH/15.0A	(10hr, 1.80V/cell, 25°C/77°F)
	130.5 AH/26.1A	(5hr, 1.75V/cell, 25°C/77°F)
	117.0 AH/39.0A	(3hr, 1.75V/cell, 25°C/77°F)
	93.0 AH/93.0A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	1500A (5s)	
Internal Resistance	Approx 3.5mΩ	
Operating Temp. Range	Discharge : -15~50°C (5~122°F)	
	Charge : 0~40°C (32~104°F)	
	Storage : -15~40°C (5~104°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 45.0A. Voltage	
	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	LL 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.	



### Applications

- ◆ UPS and EPS
- ◆ Emergency light
- ◆ Railway signal and aircraft signal system
- ◆ Marine and power stations Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply, DC power supply

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	175.5	147.6	131.0	108.6	83.8	71.7	46.4	34.9	28.6	24.1	21.1	16.9	14.5	7.76
1.80V/cell	200.8	165.7	144.8	118.0	90.4	75.7	49.9	37.5	30.4	25.5	22.3	17.8	15.0	8.03
1.75V/cell	228.1	186.8	160.0	128.2	98.6	82.5	51.9	39.0	31.4	26.1	23.0	18.4	15.4	8.23
1.70V/cell	257.6	207.3	176.6	139.9	106.2	87.3	54.7	41.1	32.9	27.6	24.1	19.2	16.0	8.44
1.65V/cell	276.6	221.9	187.9	147.7	112.4	90.3	56.7	42.7	34.1	28.5	25.0	19.8	16.4	8.70
1.60V/cell	304.3	243.0	204.1	157.6	116.8	93.0	58.1	43.8	34.9	29.2	25.5	20.2	16.8	8.84

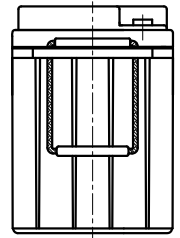
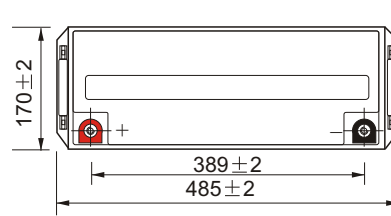
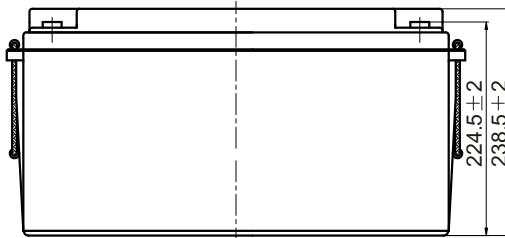
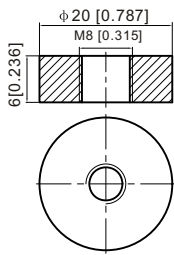
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	327.7	278.4	249.5	209.2	162.8	139.7	91.1	68.7	56.5	47.6	41.9	33.7	29.1	15.5
1.80V/cell	370.6	308.4	271.8	223.7	174.2	146.7	97.3	73.4	59.7	50.3	44.2	35.4	29.9	16.0
1.75V/cell	414.2	343.4	297.5	241.1	188.2	159.2	100.8	76.1	61.6	51.3	45.4	36.5	30.7	16.4
1.70V/cell	457.4	375.7	326.0	261.8	202.0	167.9	105.9	79.9	64.2	54.1	47.5	38.0	31.9	16.8
1.65V/cell	486.7	399.2	344.2	274.1	211.9	172.5	109.2	82.8	66.5	55.7	49.0	39.2	32.7	17.3
1.60V/cell	523.4	430.1	369.9	290.4	219.0	176.7	111.4	84.5	67.8	56.8	49.9	39.8	33.3	17.6

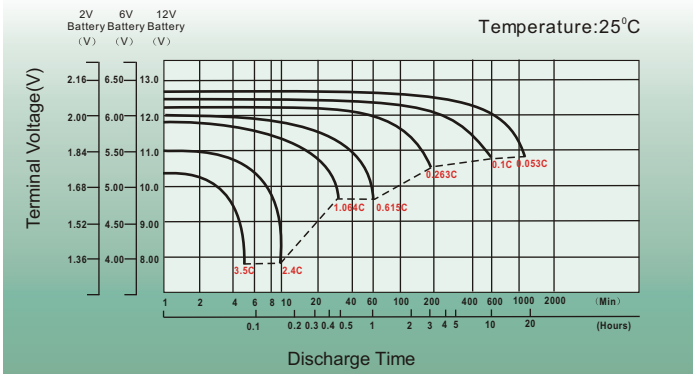
# Dimensions

## T11 Terminal

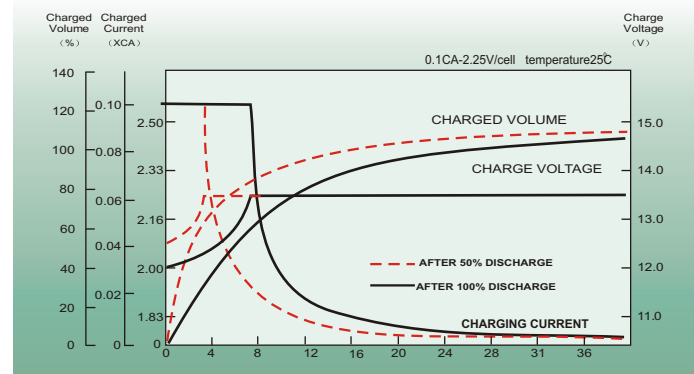
Unit: mm [inches]



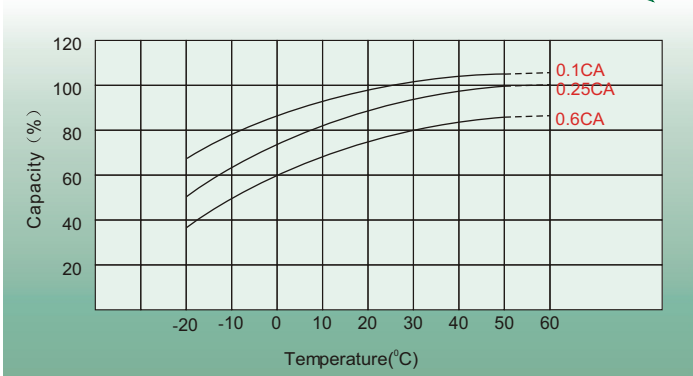
## Discharge Characteristics



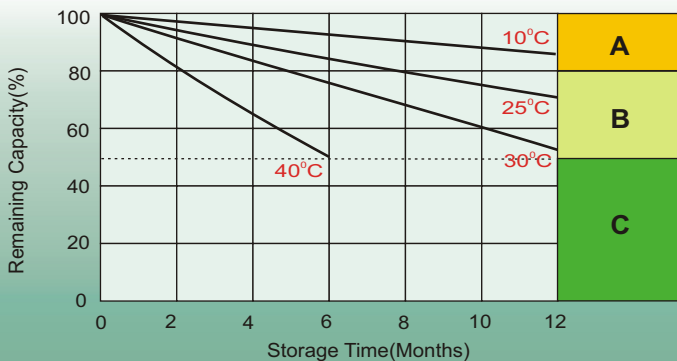
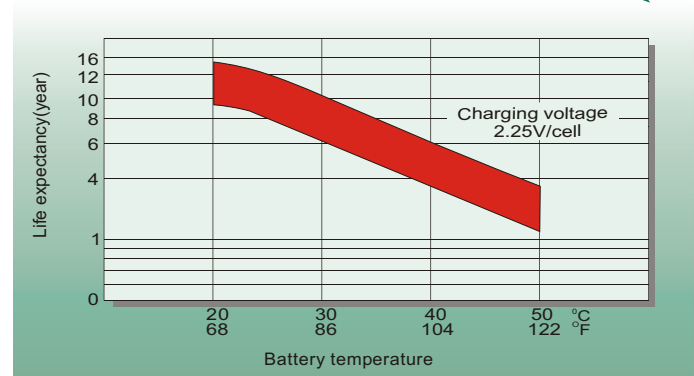
## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Effect of Temperature on Long Term Float Life



## 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 volatge 2.25V/cell.
  2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
  3. Charged for 8~10hours 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.