

## Specification

Nominal Voltage	12V
Nominal Capacity(10HR)	60.0AH
Dimensions	Length 348±3mm (13.7 inches)
	Width 167±2mm (6.57 inches)
	Container Height 178±2mm (7.01 inches)
	Total Height (with Terminal) 178±2mm (7.01 inches)
Approx Weight	Approx 19.2 kg (42.3lbs)
Terminal	T6
Container Material	ABS
Rated Capacity	64.8 AH/3.24A (20hr, 1.80V/cell, 25°C/77°F)
	60.0AH/6.00A (10hr, 1.80V/cell, 25°C/77°F)
	52.5 AH/10.5A (5hr, 1.75V/cell, 25°C/77°F)
	47.4 AH/15.8A (3hr, 1.75V/cell, 25°C/77°F)
	37.8 AH/37.8A (1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	780A (5s)
Internal Resistance	Approx 7.3mΩ
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 18.0A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C
	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C
Standby Use	
Capacity affected by Temperature	40°C (104°F) 103%
	25°C (77°F) 100%
	0°C (32°F) 86%
Self Discharge	Long life standby 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.
Life expectancy	8~12 years at 25°C with charge voltage of 2.25V/cell



## Applications

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system



Conform to:  
IEC60896-21&22 and/or IEC61427

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	81.4	67.0	57.8	51.3	42.6	33.2	28.9	18.9	14.1	11.6	9.7	8.51	6.83	5.81	3.13
1.80V/cell	97.2	76.7	65.3	56.9	46.4	35.7	30.8	20.4	15.2	12.3	10.3	9.02	7.19	6.00	3.24
1.75V/cell	112.3	87.5	73.4	62.8	50.4	38.9	33.4	21.2	15.8	12.7	10.5	9.30	7.43	6.22	3.32
1.70V/cell	126.7	99.0	81.6	69.3	55.0	42.0	35.5	22.3	16.6	13.3	11.1	9.75	7.74	6.46	3.41
1.65V/cell	139.0	106.2	87.1	73.6	58.0	44.3	36.7	23.1	17.3	13.8	11.5	10.1	8.00	6.64	3.52
1.60V/cell	152.6	117.0	96.0	80.5	62.2	46.1	37.8	23.8	17.7	14.1	11.8	10.3	8.15	6.78	3.57

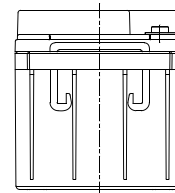
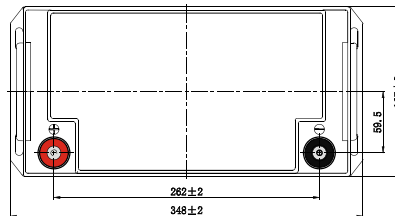
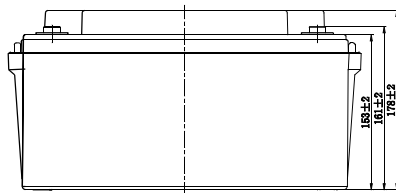
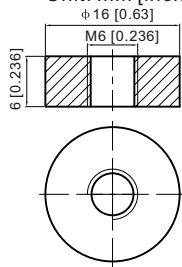
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	151.6	126.0	110.0	98.5	82.7	65.0	56.8	37.4	28.0	23.0	19.4	17.0	13.7	11.7	6.31
1.80V/cell	179.2	142.7	122.5	107.6	88.8	69.3	60.1	40.1	29.9	24.3	20.5	18.0	14.4	12.1	6.53
1.75V/cell	202.8	160.2	136.1	117.8	95.6	74.8	65.0	41.5	31.0	25.1	20.9	18.5	14.9	12.5	6.68
1.70V/cell	222.6	177.3	149.2	128.9	103.7	80.5	68.7	43.6	32.5	26.1	22.0	19.3	15.5	13.0	6.85
1.65V/cell	240.7	188.4	158.1	136.0	108.4	84.2	70.6	44.9	33.7	27.1	22.6	20.0	15.9	13.3	7.06
1.60V/cell	258.4	203.0	171.3	147.0	115.5	87.1	72.4	46.0	34.4	27.6	23.1	20.3	16.2	13.6	7.16

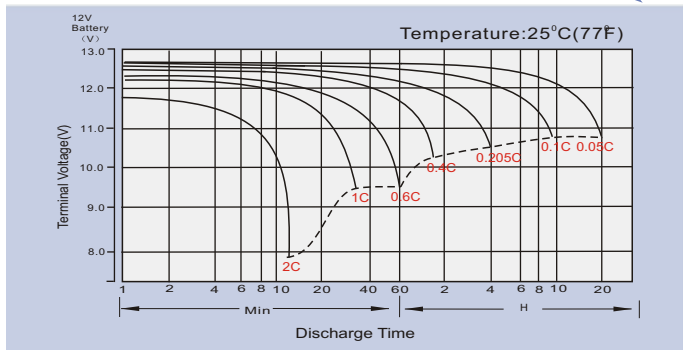
## Dimensions

### T6 Terminal

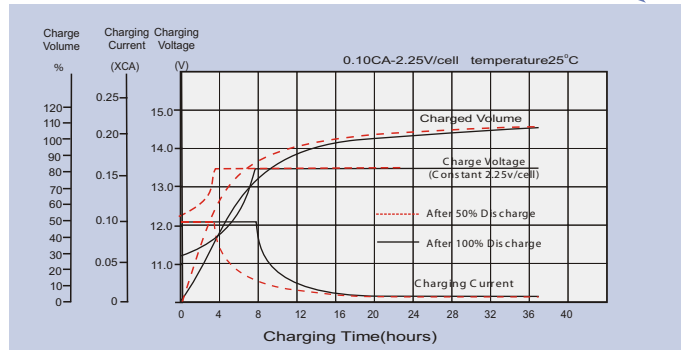
Unit: mm [inches]



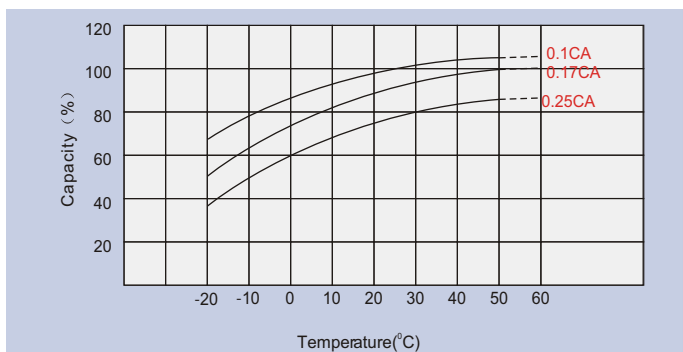
## Discharge Characteristics



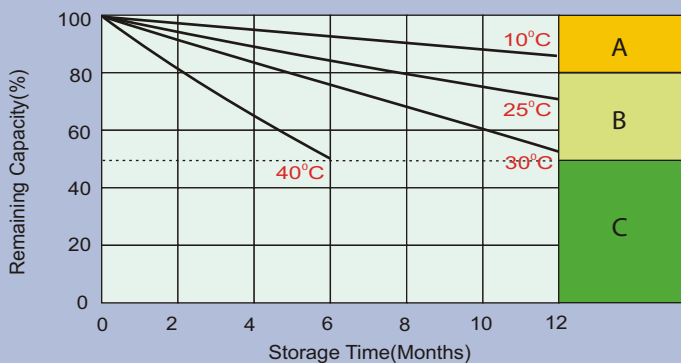
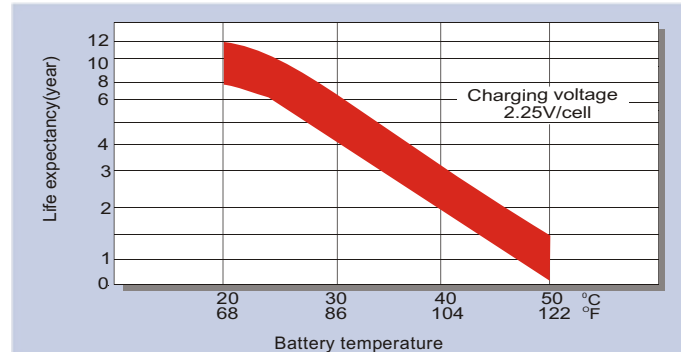
## Float Charging Characteristics



## 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 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.