

## Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	200.0AH	
Dimension	Length	522±3mm (20.55 inches)
	Width	240±2mm (9.45 inches)
	Container Height	218±2mm (8.58 inches)
	Total Height (with Terminal)	224±2mm (8.81 inches)
Approx Weight	Approx 64.0 Kg (141.14lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	208.0 AH/10.4A	(20hr, 1.80V/cell, 25°C/77°F)
	200.0 AH/20.0A	(10hr, 1.80V/cell, 25°C/77°F)
	172.0 AH/34.4A	(5hr, 1.75V/cell, 25°C/77°F)
	156.0 AH/52.0A	(3hr, 1.75V/cell, 25°C/77°F)
	122.0 AH/122.0A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	2000A (5s)	
Internal Resistance	Approx 2.7mΩ	
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 60.0A. 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)

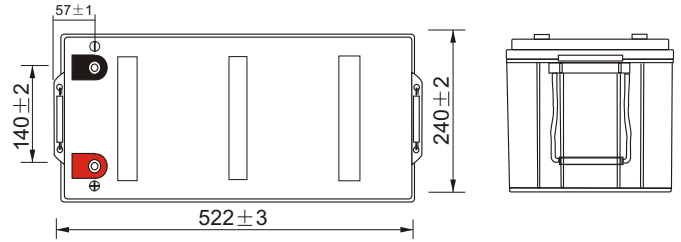
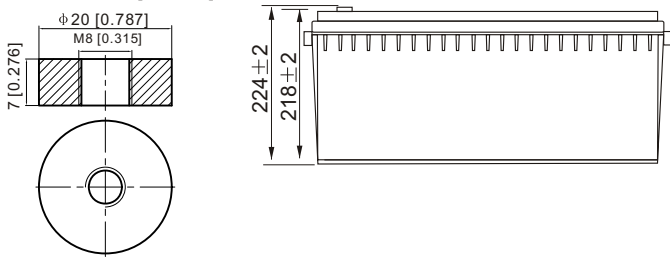
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	342.3	269.1	228.9	191.4	152.1	115.1	94.3	60.1	47.5	38.8	31.3	27.2	22.1	18.9	10.3
1.80V/cell	459.5	343.9	276.5	226.3	179.5	133.9	105.6	65.5	51.1	41.4	33.6	29.2	23.4	20.0	10.4
1.75V/cell	/	377.8	302.0	243.4	186.4	139.0	110.5	68.0	52.0	42.3	34.4	30.0	23.8	20.2	10.5
1.70V/cell	/	411.8	322.5	255.8	194.0	144.5	114.0	70.7	53.5	43.5	35.3	30.6	24.2	20.4	10.7
1.65V/cell	/	444.4	342.9	271.8	204.6	148.1	117.8	72.7	55.8	45.0	36.3	31.3	24.6	20.8	10.8
1.60V/cell	/	482.5	366.7	289.5	216.0	154.4	122.0	75.1	57.5	46.4	37.5	32.0	24.8	21.0	10.9

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

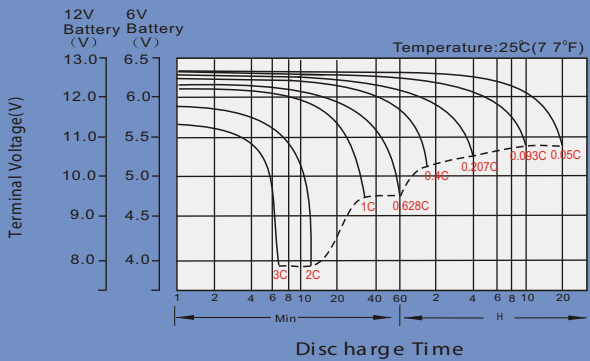
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	625.9	497.1	427.1	360.8	290.0	221.3	181.9	116.6	92.6	75.8	61.3	53.5	43.6	37.4	20.4
1.80V/cell	831.2	627.7	509.0	420.3	336.9	255.4	202.6	126.4	99.0	80.5	65.5	57.2	46.1	39.5	20.6
1.75V/cell	/	678.7	549.2	447.8	346.9	262.5	211.0	130.6	100.5	82.1	67.0	58.6	46.8	39.9	20.7
1.70V/cell	/	723.0	578.2	467.1	359.1	272.0	217.0	135.6	103.1	84.1	68.6	59.7	47.4	40.2	21.1
1.65V/cell	/	773.1	610.1	492.5	375.7	276.3	222.7	138.5	107.0	86.6	70.2	60.8	48.1	41.0	21.4
1.60V/cell	/	820.2	641.7	518.9	393.8	286.4	229.4	142.5	109.8	89.1	72.3	62.0	48.4	41.4	21.5

# Dimensions

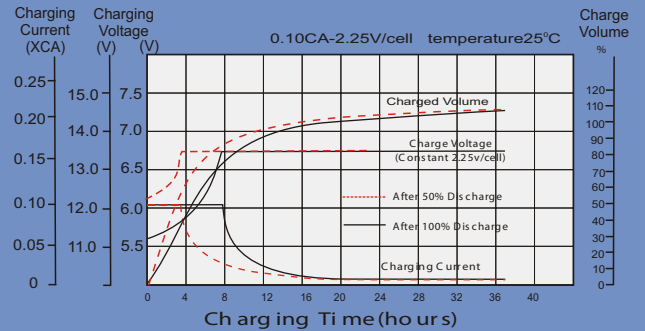
## T11 Terminal



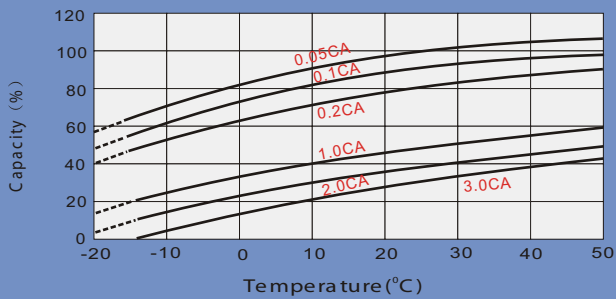
## Discharge Characteristics



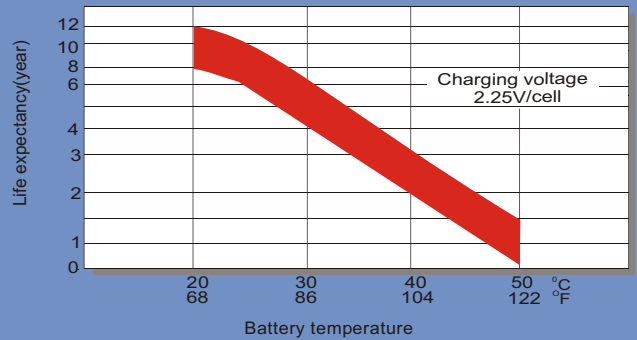
## Float Charging Characteristics



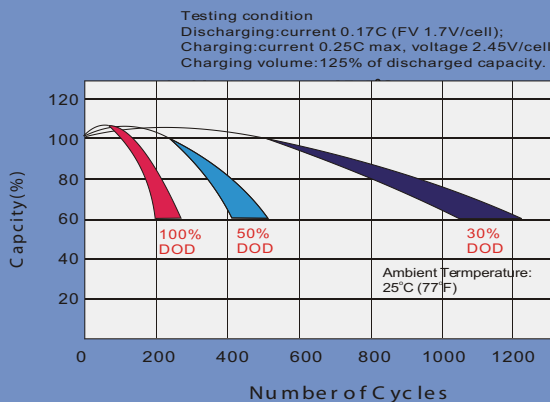
## Temperature Effects in Relation to Battery Capacity



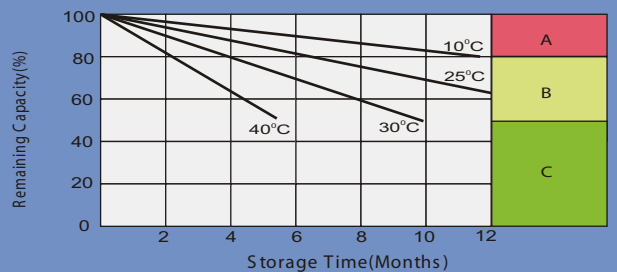
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge Temperature



## 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. Optimal 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 0.05 CA.
- C** Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.