



### Specification

Nominal Voltage	12V	
Nominal Capacity(8HR)	55.0AH	
Dimension	Length	277±2mm (10.91 inches)
	Width	106±1mm (4.17 inches)
	Container Height	222±2mm (8.74 inches)
	Total Height (with Terminal)	222±2mm (8.74 inches)
Approx Weight	Approx 18.0 Kg (39.7 lbs)	
Terminal	T6	
Container Material	ABS	
Rated Capacity	60.4AH/3.02A	(20hr, 1.80V/cell, 25°C/77°F)
	57.1AH/5.71A	(10hr, 1.80V/cell, 25°C/77°F)
	55.0AH/6.88A	(8hr, 1.80V/cell, 25°C/77°F)
	52.0AH/10.4A	(5hr, 1.75V/cell, 25°C/77°F)
	38.1AH/38.1A	(1hr, 1.67V/cell, 25°C/77°F)
Max. Discharge Current	550A (5s)	
Internal Resistance	Approx 6.0mΩ	
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 16.5A. 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	Synergy FT 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

- ◆ For standard 19 inches or 23 inches power cabinets
- ◆ Network connection equipment of communication system
- ◆ Power system of special network or local area network
- ◆ UPS, standby power supply
- ◆ Power station systems
- ◆ Railway and marine systems



### 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	95.7	79.7	68.4	53.7	41.6	33.8	20.2	14.5	11.7	9.66	8.40	6.54	5.46	2.89
1.80V/cell	108.4	88.9	75.7	58.7	44.8	36.1	21.3	15.5	12.3	10.2	8.83	6.88	5.71	3.02
1.75V/cell	119.0	96.2	80.8	61.7	46.5	37.4	21.7	15.7	12.6	10.4	8.97	6.96	5.78	3.07
1.70V/cell	127.3	101.3	84.1	63.5	47.6	37.9	22.0	15.9	12.7	10.5	9.08	7.06	5.83	3.09
1.67V/cell	131.7	103.8	85.8	64.3	47.7	38.1	22.1	16.0	12.8	10.6	9.19	7.15	5.89	3.11
1.60V/cell	138.5	107.8	89.7	65.9	49.0	39.1	22.4	16.3	13.0	10.8	9.35	7.32	6.00	3.12

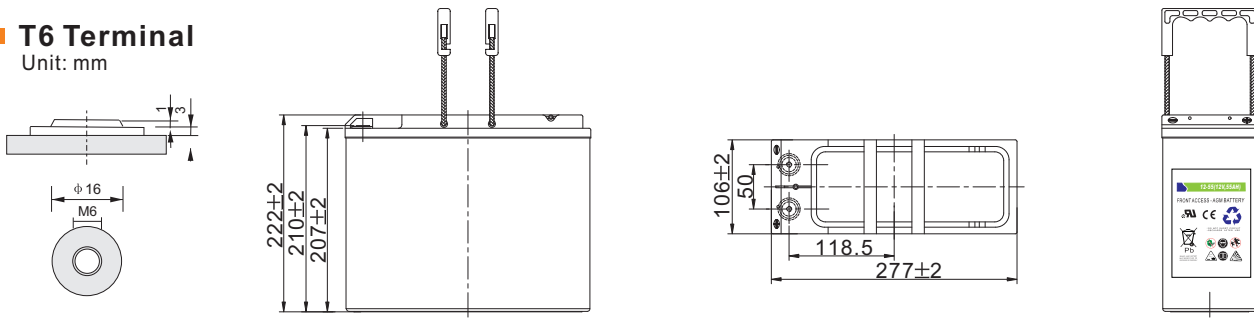
### Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	178.6	150.4	130.4	103.4	80.8	65.9	39.6	28.6	23.0	19.1	16.7	13.05	10.9	5.79
1.80V/cell	200.1	165.4	142.2	111.4	86.3	70.0	41.5	30.3	24.1	20.0	17.5	13.67	11.4	6.04
1.75V/cell	216.1	176.8	150.3	116.1	88.7	72.2	42.1	30.6	24.6	20.4	17.7	13.80	11.5	6.12
1.70V/cell	226.0	183.7	155.2	118.8	90.4	72.9	42.6	30.9	24.8	20.5	17.9	13.99	11.6	6.16
1.67V/cell	233.0	187.4	157.8	120.1	90.5	73.0	42.7	31.0	24.9	20.7	18.0	14.15	11.7	6.19
1.60V/cell	238.2	190.8	162.5	121.5	91.9	74.2	43.0	31.4	25.3	21.1	18.3	14.43	11.9	6.21

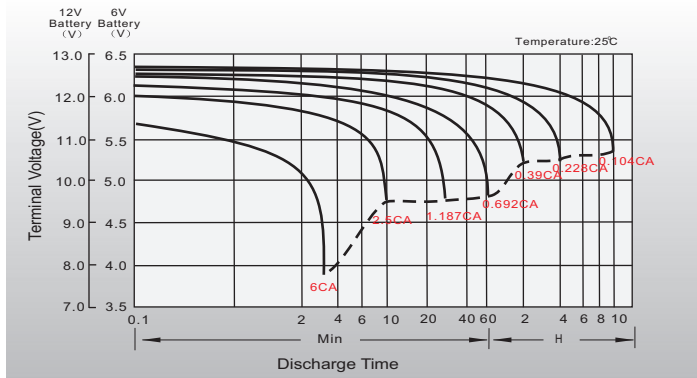
## Dimensions

### T6 Terminal

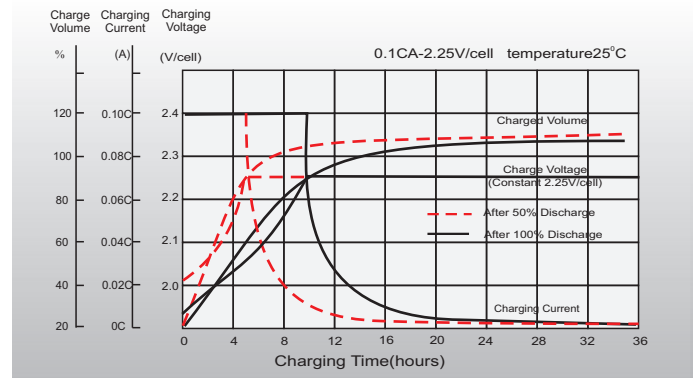
Unit: mm



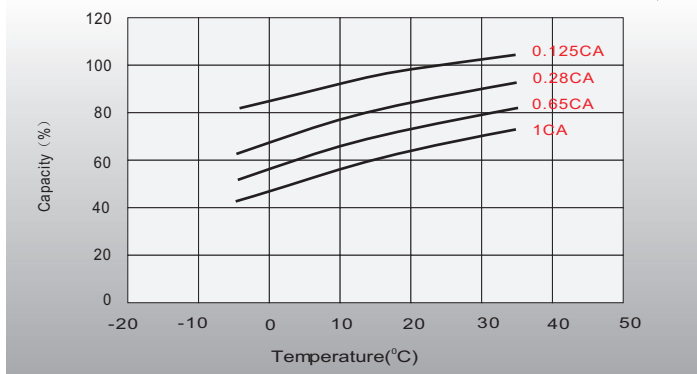
## Discharge Characteristics



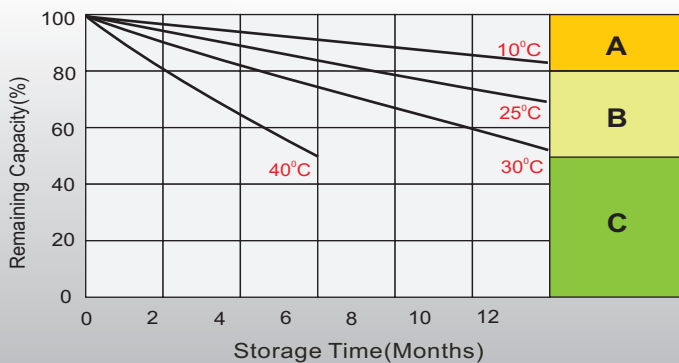
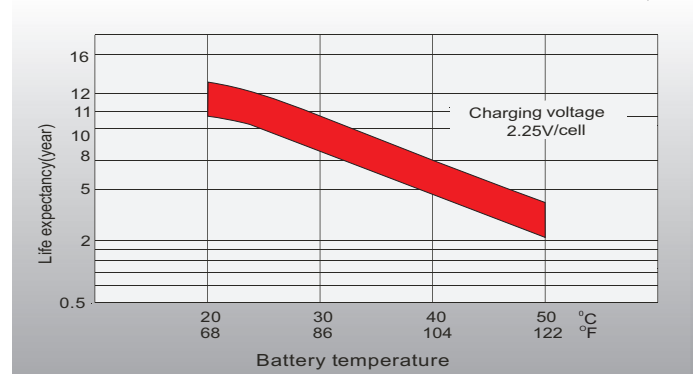
## Float Charging Characteristics



## 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.

## Sales Office

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