

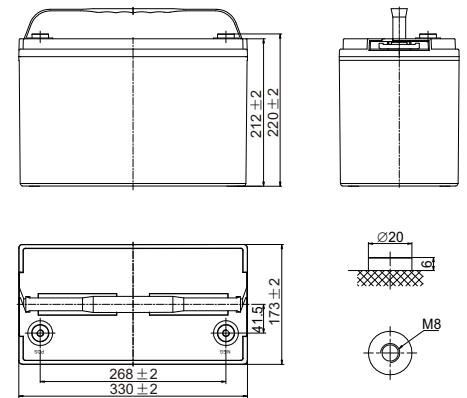
## Data Sheet

### Specifications

Rated Voltage	12V	
Nominal Capacity	110.0Ah	(C <sub>10</sub> , 1.80V/cell)
Dimension	Length	330±2mm (12.99 inches)
	Width	173±2mm (6.81 inches)
	Container Height	212±2mm (8.35 inches)
	Total Height	220±2mm (8.66 inches)
Approx Weight	31.2 Kg (68.8 lbs)	
Terminal	M8	
Container Material	ABS	
Rated Capacity (25°C)	115.0Ah	(20hr, 5.75A, 1.80V/cell)
	110.0Ah	(10hr, 11.0A, 1.80V/cell)
	98.0Ah	(5hr, 19.6A, 1.75V/cell)
	89.4Ah	(3hr, 29.8A, 1.75V/cell)
	68.7Ah	(1hr, 68.7A, 1.60V/cell)
Max. Discharge Current	1100A (5s)	
Internal Resistance (25°C)	Approx 4.5mΩ	
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 33.0A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	Initial Charging Current less than 33.0A. Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	SY 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.	



### Layout



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

F.V/Time	15min	20min	30min	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	138.3	108.7	97.2	60.2	43.6	36.7	26.9	21.1	18.3	12.4	10.3	5.46
1.80V/cell	156.7	122.9	105.9	62.4	45.1	37.9	29.2	22.5	19.3	13.1	11.0	5.75
1.75V/cell	169.6	132.7	108.0	65.5	47.4	39.9	29.8	23.0	19.6	13.1	11.1	5.77
1.70V/cell	180.2	140.7	110.2	66.8	48.4	40.7	30.4	23.4	19.9	13.3	11.2	5.80
1.67V/cell	185.4	144.6	111.8	67.7	49.1	41.3	30.6	23.7	20.4	13.5	11.3	5.85
1.60V/cell	191.2	148.3	113.4	68.7	49.8	41.9	30.9	24.0	20.6	13.7	11.4	5.91

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

F.V/Time	15min	20min	30min	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	261.8	206.8	185.8	116.5	84.7	71.4	52.6	41.4	36.1	24.7	20.5	10.9
1.80V/cell	292.9	231.4	200.7	120.0	87.1	73.4	56.8	44.1	37.8	25.9	21.4	11.3
1.75V/cell	312.6	246.9	203.2	125.3	91.2	76.9	57.8	44.7	38.3	25.9	21.6	11.3
1.70V/cell	328.6	259.6	205.5	127.2	92.5	78.1	58.7	45.3	38.9	26.3	21.8	11.5
1.67V/cell	333.9	263.8	207.0	128.3	93.4	78.9	59.0	45.9	39.5	26.6	22.0	11.6
1.60V/cell	338.6	267.5	207.9	129.3	94.2	79.6	59.2	46.2	39.9	26.9	22.3	11.7

## Data Sheet

### Applications

- All purpose
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system

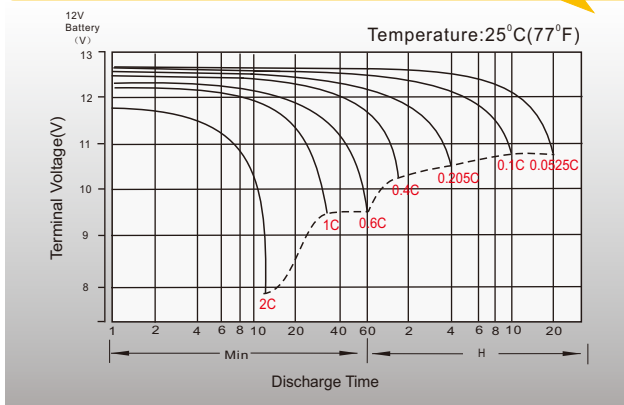
### General Features

- 8 years design life(25°C)
- Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
- PbCaSn alloy for plate grids: less gassing, less self-discharging
- High quality AGM separator: extend cycle life and prevent micro short circuit
- High purity raw material: ensure low self discharge rate

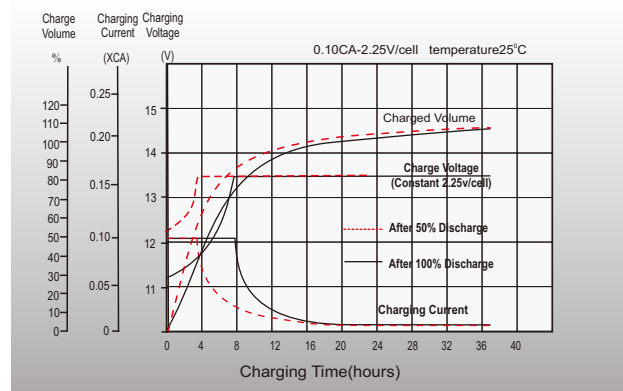
### Standards

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured in Leoch@IATF16949, OHSAS 18001, ISO 9001 and ISO 14001 certified production facilities

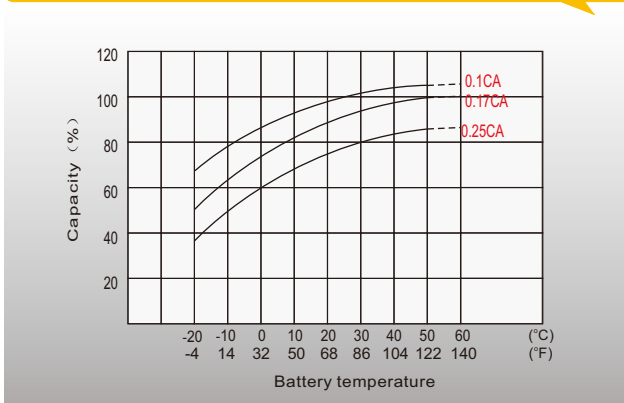
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Float Service Life

