

# AGM Battery (YD Series) YD 12-100 (12V 100Ah)

## Specifications

Rated Voltage	12V	
Nominal Capacity	100.0Ah	(C <sub>10</sub> , 1.80V/cell)
Dimension	Length	330±3mm (12.99 inches)
	Width	173±2mm (6.81 inches)
	Container Height	212±3mm (8.35 inches)
	Total Height	220±3mm (8.66 inches)
Approx Weight	30.6 Kg (67.5 lbs)	
Terminal	T11 (M8)	
Container Material	ABS	
Rated Capacity (25°C)	105.0 Ah	(20hr, 5.25A, 1.80V/cell)
	100.0 Ah	(10hr, 10.0A, 1.80V/cell)
	91.0 Ah	(5hr, 18.2A, 1.75V/cell)
	82.8 Ah	(3hr, 27.6A, 1.75V/cell)
	63.8 Ah	(1hr, 63.8A, 1.60V/cell)
Max. Discharge Current	1200A (5s)	
Internal Resistance (25°C)	Approx 4.9mΩ	
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 20.0A Voltage	
	14.4V~14.7V at 25°C (77°F)Temp. Coefficient -30mV/°C	
Standby Use	Initial Charging Current less than 20.0A 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	YD 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

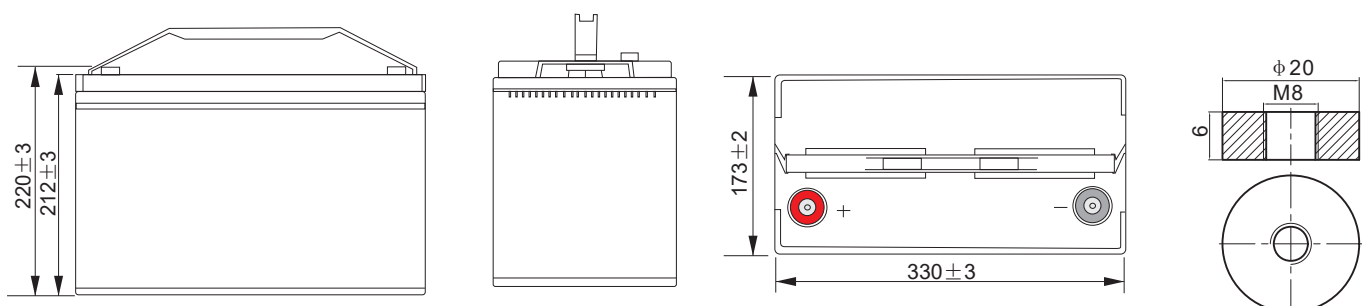
- All purpose
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system



## General Features

- 10 years float 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

## Layout



## AGM Battery (YD Series) YD 12-100 (12V 100Ah)

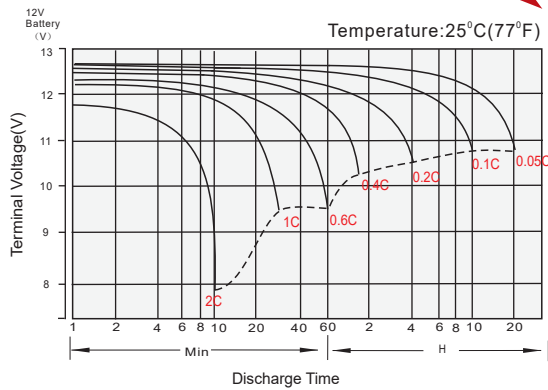
### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	199.7	142.0	128.3	100.9	90.2	66.0	55.9	40.5	34.0	25.0	19.6	17.0	15.0	11.5	9.55	5.07
1.80V/cell	227.2	161.2	145.4	114.0	98.2	69.9	57.9	41.9	35.2	27.1	20.9	17.9	16.1	12.1	10.0	5.25
1.75V/cell	246.7	174.8	157.4	123.1	100.2	72.4	60.7	44.0	37.0	27.6	21.3	18.2	16.2	12.2	10.1	5.30
1.70V/cell	263.8	186.4	167.1	130.5	102.2	73.9	61.9	44.9	37.7	28.2	21.7	18.5	16.3	12.4	10.2	5.36
1.67V/cell	273.0	192.3	172.0	134.1	103.7	74.9	62.8	45.5	38.3	28.4	22.0	18.9	16.4	12.6	10.3	5.42
1.60V/cell	282.6	198.9	177.3	137.6	105.2	76.0	63.8	46.2	38.9	28.7	22.3	19.1	16.5	12.7	10.5	5.49

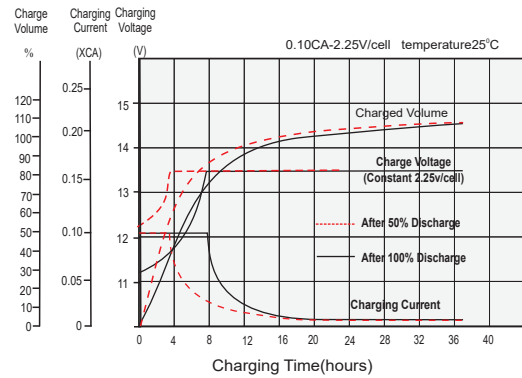
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	373.0	267.2	242.9	191.9	172.3	126.8	108.1	78.5	66.2	48.8	38.4	33.5	29.6	22.9	19.0	10.1
1.80V/cell	417.3	298.9	271.7	214.6	186.2	133.5	111.3	80.8	68.0	52.7	40.9	35.1	31.7	24.0	19.9	10.4
1.75V/cell	445.4	319.0	289.9	229.1	188.5	137.5	116.3	84.6	71.3	53.6	41.5	35.6	31.8	24.1	20.0	10.5
1.70V/cell	468.2	335.3	304.8	240.8	190.7	139.3	118.0	85.8	72.5	54.4	42.1	36.1	31.9	24.4	20.2	10.6
1.67V/cell	475.8	340.8	309.8	244.7	192.0	140.5	119.0	86.7	73.2	54.7	42.6	36.7	32.0	24.7	20.4	10.7
1.60V/cell	482.5	345.6	314.1	248.1	192.8	141.2	119.9	87.4	73.8	54.9	42.9	37.0	32.1	25.0	20.6	10.9

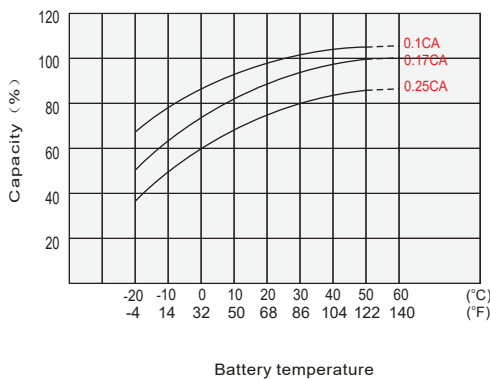
### Discharge Characteristics



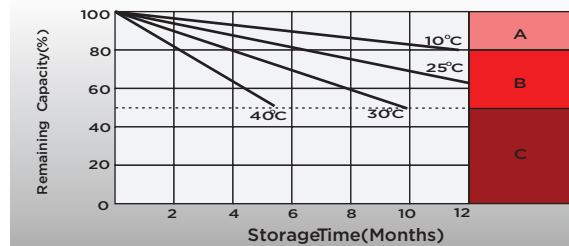
### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### 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.