

# US2-800(2V800AH)

## Application

- Data Center
- Telecommunication center room
- 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

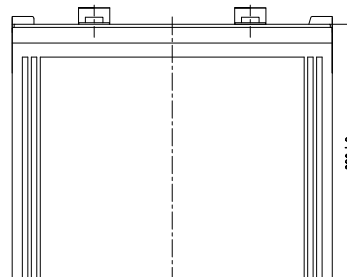
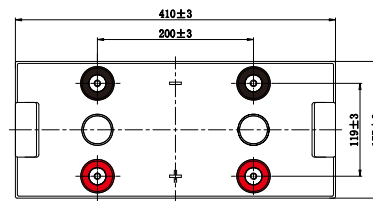


## Features

- General purpose: 9~14 years design life
- VRLA Battery, maintenance-free
- Low self-discharge rate
- Silver-coated copper terminals
- PbCaSn alloy for plate grids: less gassing, less self-discharge
- ABS container, Flame retardant UL94-V0

### Layout

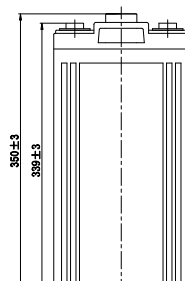
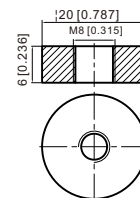
Unit: mm



### Terminal

#### T11 Terminal

Unit: mm [inches]

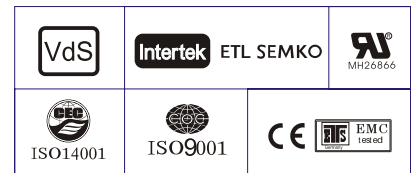


## General Purpose AGM Battery-US Series

# US2-800(2V800AH)

### Specification

Nominal Voltage	12V	
Rated Capacity (Ah)	840.0 AH/42.0A	(20hr, 1.80V/cell, 25°C/77°F)
	800.0 AH/80.0A	(10hr, 1.80V/cell, 25°C/77°F)
	696.0 AH/139.2A	(5hr, 1.75V/cell, 25°C/77°F)
	604.8 AH/201.6A	(3hr, 1.75V/cell, 25°C/77°F)
	485.6 AH/485.6A	(1hr, 1.60V/cell, 25°C/77°F)
Dimension	Length	410±3mm (16.14 inches)
	Width	175±2mm (6.89 inches)
	Container Height	330±3mm (12.99 inches)
	Total Height (with Terminal)	350±3mm (13.78 inches)
Approx Weight	Approx 50.1 kg (110.5lbs)	
Terminal	T11	
Container Material	ABS	
Max. Discharge Current	6400A (5s)	
Internal Resistance	Approx 0.5mΩ	
Operating Temp. Range	Discharge : -15 ~ 50°C	
	Charge : 0 ~ 40°C	
	Storage : -15 ~ 40°C	
Capacity affected by Temperature	40°C	106%
	25°C	100%
	0°C	86%
Self Discharge	US series batteries can be stored up to 6 months at 25°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



### Performance - 25 °C

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

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	613.4	486.4	399.2	239.8	185.3	152.2	129.6	113.2	91.2	76.4	40.5
1.80V/cell	658.2	511.7	424.0	253.0	194.4	159.0	135.0	118.3	94.7	80.0	42.0
1.75V/cell	697.0	538.1	442.4	263.5	201.6	164.4	139.2	121.1	96.5	80.8	42.4
1.70V/cell	731.3	558.3	457.9	271.2	206.9	168.0	141.6	123.2	98.0	81.6	42.8
1.65V/cell	767.2	582.7	474.4	279.4	211.5	171.6	144.6	125.3	99.4	82.6	43.4
1.60V/cell	793.6	598.4	485.6	286.0	216.0	174.0	146.7	127.1	100.7	83.6	43.9

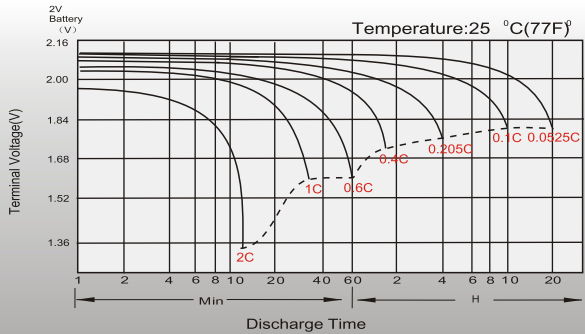
#### Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	1172.3	935.2	772.2	466.4	362.2	298.5	255.3	223.7	181.0	152.0	80.7
1.80V/cell	1247.8	977.4	815.6	489.7	378.1	310.8	264.9	232.7	187.4	158.9	83.5
1.75V/cell	1311.3	1021.7	847.2	508.0	391.1	320.3	272.1	237.5	190.5	160.3	84.2
1.70V/cell	1364.3	1052.8	872.2	520.7	399.9	325.9	276.0	241.3	193.3	161.7	85.0
1.65V/cell	1420.5	1092.5	898.6	534.1	406.9	331.8	280.9	244.8	195.5	163.5	86.0
1.60V/cell	1454.7	1111.5	913.4	543.4	413.5	335.0	283.8	247.4	197.7	165.2	86.9

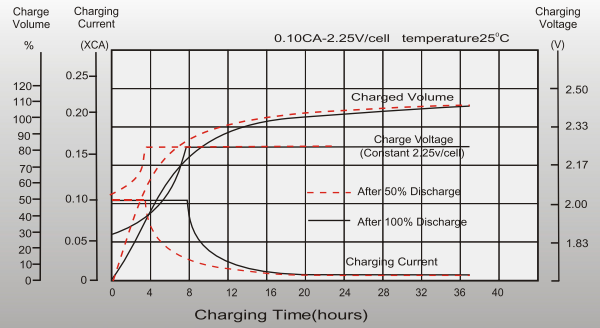
## General Purpose AGM Battery-US Series

### Characteristic Curve

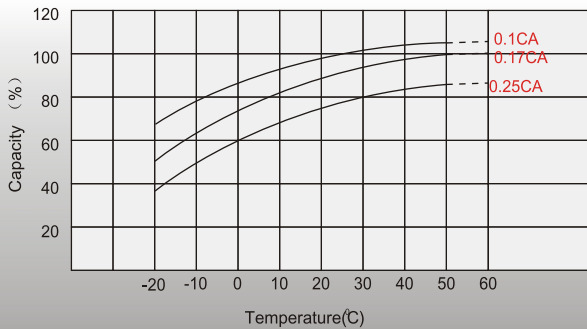
#### Discharge Characteristics



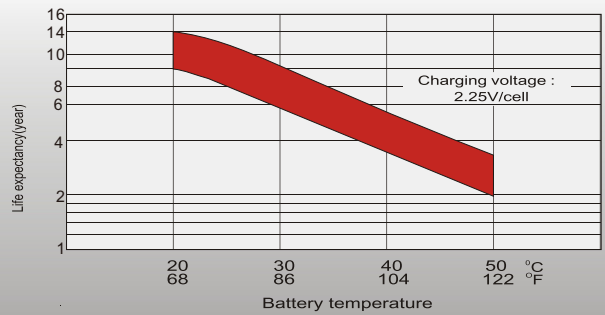
#### Float Charging Characteristics



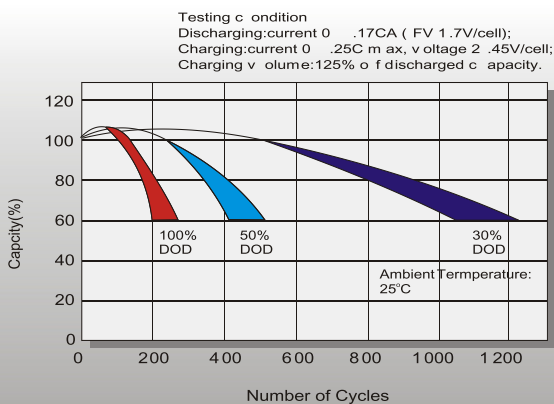
#### Temperature Effects in Relation to Battery Capacity



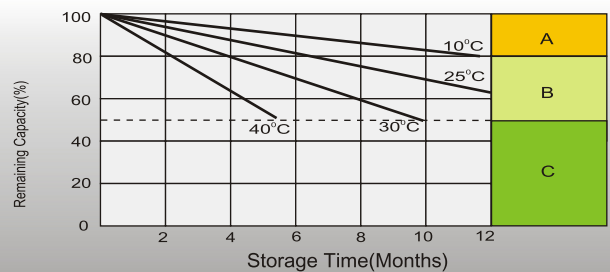
#### Effect of Temperature on Long Term Float Life



#### Cycle Life in Relation to Depth of Discharge



#### Self Discharge Characteristics



**A** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)

Supplementary charge required before use. Optional charging way as below:

- B** 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.