

# US2-600(2V600AH)

## 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

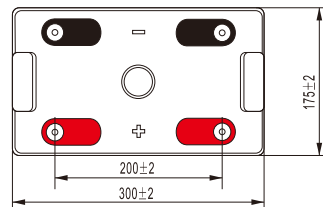


## Features

- 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

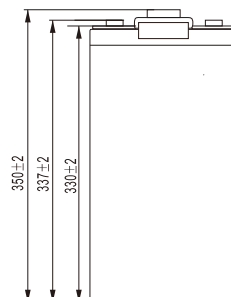
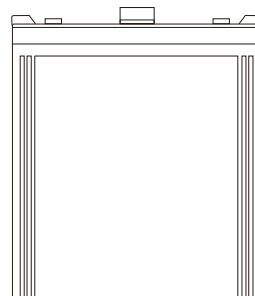
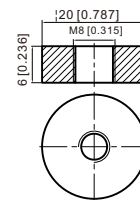
Unit: mm



### Terminal

#### T11 Terminal

Unit: mm [inches]



UPLUS ENERGY TECHNOLOGY CO., LTD

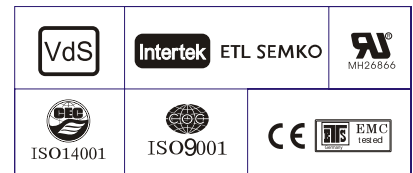
www.uplus-battery.com

## General Purpose AGM Battery-US Series

# US2-600(2V600AH)

### Specification

Nominal Voltage	12V	
Rated Capacity (Ah)	630.0 AH/31.5A	(20hr, 1.80V/cell, 25°C/77°F)
	600.0 AH/60.0A	(10hr, 1.80V/cell, 25°C/77°F)
	522.0 AH/104.4A	(5hr, 1.75V/cell, 25°C/77°F)
	453.6AH/151.2A	(3hr, 1.75V/cell, 25°C/77°F)
	364.2 AH/364.2A	(1hr, 1.60V/cell, 25°C/77°F)
Dimension	Length	300±3mm (11.81 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 35.5 kg (78.3lbs)	
Terminal	T11	
Container Material	ABS	
Max. Discharge Current	4800A (5s)	
Internal Resistance	Approx 0.55mΩ	
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	460.1	364.8	299.4	179.8	139.0	114.2	97.2	84.9	68.4	57.3	30.4
1.80V/cell	493.7	383.8	318.0	189.7	145.8	119.3	101.3	88.7	71.0	60.0	31.5
1.75V/cell	522.8	403.6	331.8	197.6	151.2	123.3	104.4	90.8	72.4	60.6	31.8
1.70V/cell	548.5	418.8	343.4	203.4	155.2	126.0	106.2	92.4	73.5	61.2	32.1
1.65V/cell	575.4	437.0	355.8	209.5	158.6	128.7	108.5	94.0	74.6	62.0	32.5
1.60V/cell	595.2	448.8	364.2	214.5	162.0	130.5	110.0	95.3	75.5	62.7	32.9

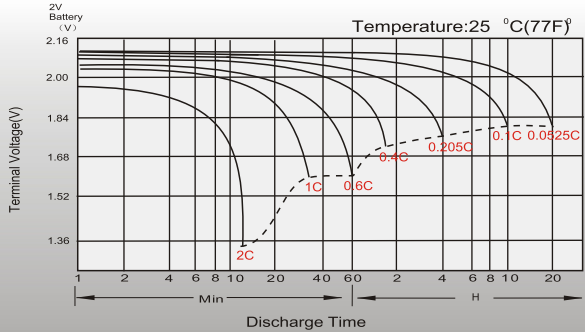
#### Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	879.2	701.4	579.1	349.8	271.6	223.9	191.5	167.8	135.7	114.0	60.5
1.80V/cell	935.8	733.1	611.7	367.3	283.6	233.1	198.6	174.6	140.5	119.2	62.6
1.75V/cell	983.5	766.3	635.4	381.0	293.3	240.2	204.1	178.1	142.9	120.2	63.2
1.70V/cell	1023.2	789.6	654.2	390.5	300.0	244.4	207.0	181.0	144.9	121.3	63.8
1.65V/cell	1065.4	819.4	673.9	400.6	305.2	248.8	210.7	183.6	146.6	122.7	64.5
1.60V/cell	1091.0	833.6	685.1	407.6	310.1	251.2	212.9	185.5	148.3	123.9	65.1

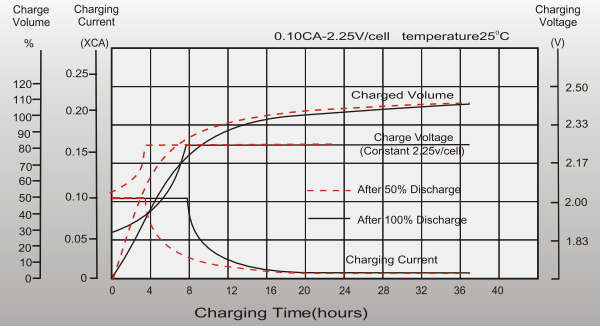
## General Purpose AGM Battery-US Series

### Characteristic Curve

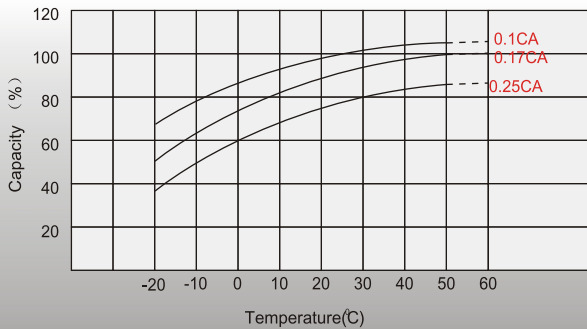
#### Discharge Characteristics



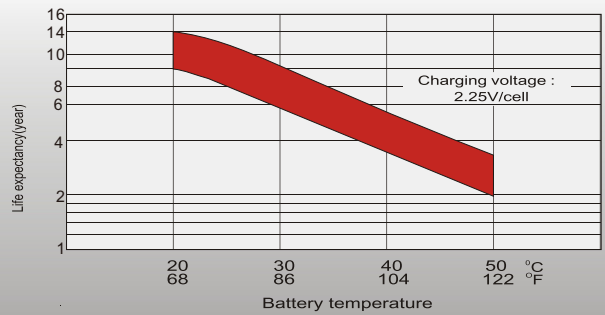
#### Float Charging Characteristics



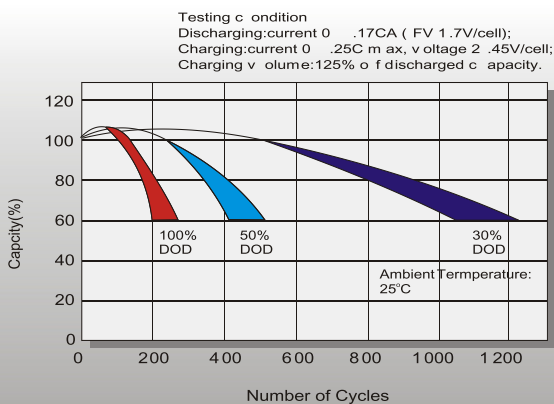
#### Temperature Effects in Relation to Battery Capacity



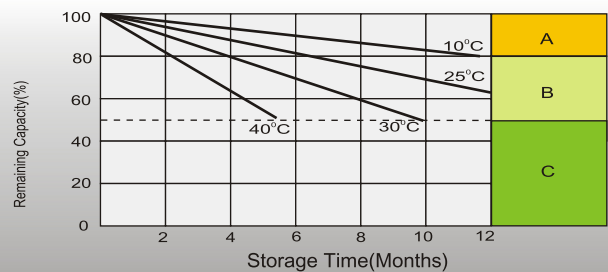
#### Effect of Temperature on Long Term Float Life



#### 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.