

# USL2-1200(2V1200AH)

## 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

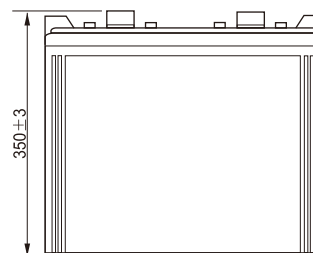
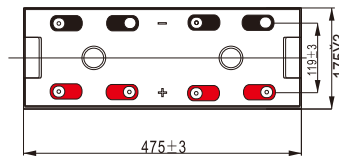


## Features

- 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

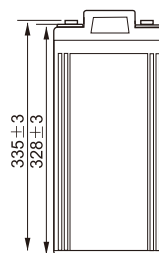
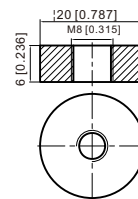
Unit: mm



### Terminal

#### T11 Terminal

Unit: mm [inches]

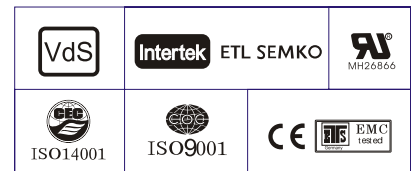


## Long Life Standby AGM Battery - USL Series

# USL2-1200(2V1200AH)

### Specification

Nominal Voltage	12V	
Rated Capacity (Ah)	1280.0 AH/64.0A	(20hr, 1.80V/cell, 25°C/77°F)
	1200.0 AH/120.0A	(10hr, 1.80V/cell, 25°C/77°F)
	1065.0 AH/213.0A	(5hr, 1.75V/cell, 25°C/77°F)
	926.4AH/308.8A	(3hr, 1.75V/cell, 25°C/77°F)
	720.8 AH/720.8A	(1hr, 1.60V/cell, 25°C/77°F)
Dimension	Length	475±3mm (18.70 inches)
	Width	175±2mm (6.89 inches)
	Container Height	328±3mm (12.91 inches)
	Total Height (with Terminal)	350±3mm (13.78 inches)
Approx Weight	Approx 65.8kg (145.1lbs)	
Terminal	M8	
Container Material	ABS	
Max. Discharge Current	9600A (5s)	
Internal Resistance	Approx 0.4mΩ	
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	USL 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.	



### 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	900.4	721.9	601.9	373.2	284.8	232.9	198.3	173.2	138.6	115.6	103.5
1.80V/cell	966.1	759.5	629.4	390.0	298.8	243.3	206.6	180.9	144.6	120.0	107.6
1.75V/cell	1023.1	798.6	656.7	405.6	308.8	251.5	213.0	185.2	147.5	121.6	109.0
1.70V/cell	1073.5	828.7	679.8	421.8	318.4	257.0	216.6	188.5	150.0	123.0	110.6
1.65V/cell	1126.1	864.8	704.2	435.6	325.6	262.5	221.3	191.8	152.3	124.4	112.0
1.60V/cell	1164.7	888.0	720.8	444.0	331.2	266.2	224.5	194.4	154.5	126.2	113.3

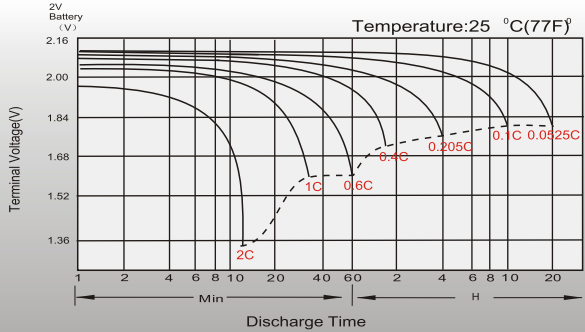
#### Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	1720.8	1388.0	1164.3	725.9	556.6	456.7	390.6	342.2	275.0	229.8	123.1
1.80V/cell	1831.5	1450.7	1210.7	755.0	581.2	475.5	405.2	356.1	286.1	238.3	127.3
1.75V/cell	1924.8	1516.4	1257.7	782.0	599.1	490.0	416.3	363.4	291.1	241.1	127.7
1.70V/cell	2002.6	1562.6	1294.9	809.9	615.4	498.7	422.2	369.3	295.8	243.8	129.1
1.65V/cell	2085.0	1621.5	1333.8	832.8	626.5	507.6	429.8	374.5	299.5	246.3	130.2
1.60V/cell	2134.8	1649.5	1355.8	843.6	634.0	512.5	434.2	378.5	303.3	249.4	131.0

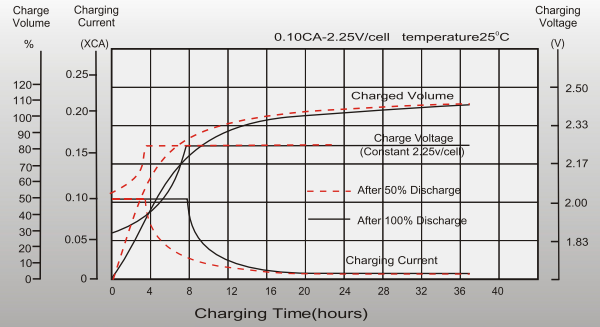
## Long Life Standby AGM Battery - USL Series

### Characteristic Curve

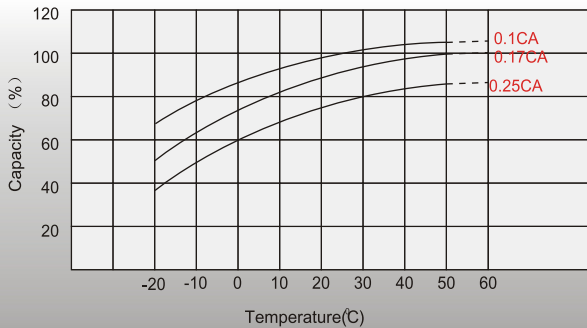
#### Discharge Characteristics



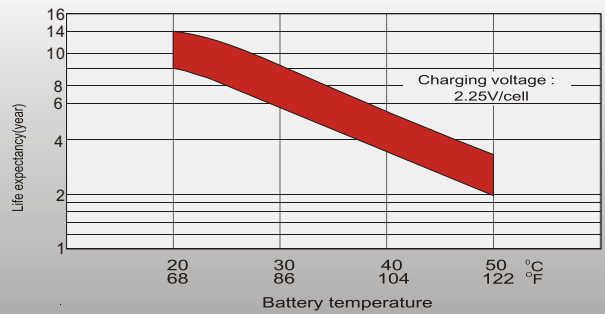
#### Float Charging Characteristics



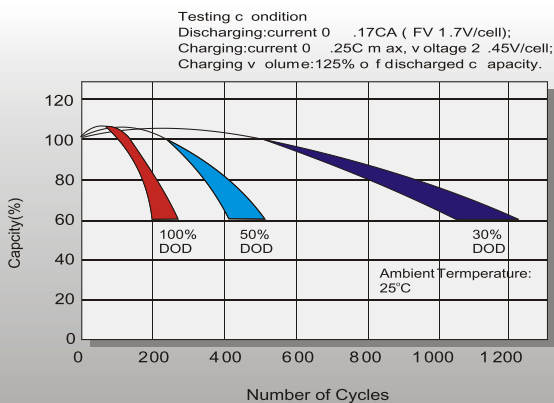
#### Temperature Effects in Relation to Battery Capacity



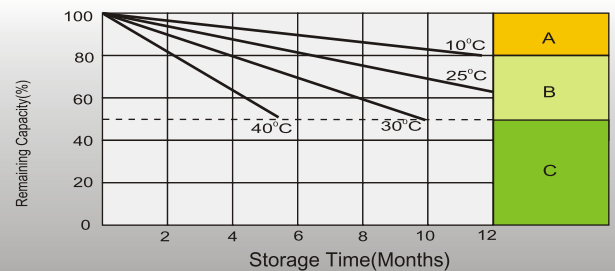
#### Effect of Temperature on Long Term Float Life



#### 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.)

**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.