

## High Power AGM Battery-UCP Series

# UCP12-24 (12V24W)

## Application

- 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

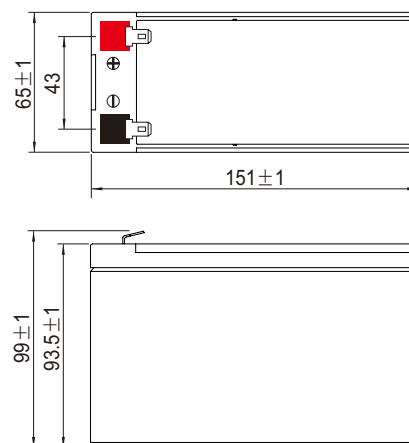


## Features

- 4~6 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

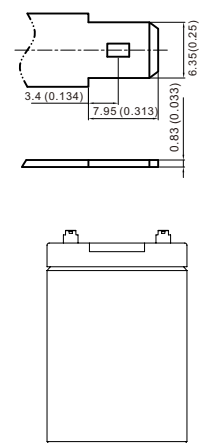
### Layout

Unit: mm



### Terminal

**T2 Terminal**  
Unit: mm [inches]

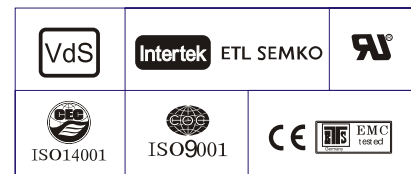


## High Power AGM Battery-UCP Series

# UCP12-24 (12V24W)



Specification	
Nominal Voltage	12V
Dimension	Length 151±2mm (5.95 inches)
	Width 65±1mm (2.56 inches)
	Container Height 93.5±1mm (3.68 inches)
	Total Height (with Terminal) 99±1mm (3.90 inches)
Rated Capacity	6.50 AH/0.650A (10hr, 1.80V/cell, 25°C/77°F)
	6.272 AH/0.784A (8hr, 1.80V/cell, 25°C/77°F)
	5.90AH/1.18A (5hr, 1.75V/cell, 25°C/77°F)
	5.46 AH/1.82A (3hr, 1.75V/cell, 25°C/77°F)
	5.14AH/5.14A (1hr, 1.60V/cell, 25°C/77°F)
Approx Weight	Approx 2.02 kg (4.45lbs)
Terminal	T2
Container Material	ABS
Max. Discharge Current	91A (5s)
Internal Resistance	Approx 25.0mΩ
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)
Capacity affected by Temperature	40°C (104°F) 103%
	25°C (77°F) 100%
	0°C (32°F) 86%
Self Discharge	UCP series batteries may be stored for up to 9 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	5min	10min	15min	20min	25min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	17.6	12.9	10.9	9.59	8.53	7.48	5.33	4.18	3.17	2.38	1.71	1.34	1.11	0.745	0.613
1.80V/cell	18.7	13.7	11.5	10.0	8.98	7.92	5.67	4.43	3.38	2.47	1.77	1.39	1.15	0.784	0.650
1.75V/cell	20.3	14.6	12.0	10.5	9.45	8.35	5.90	4.59	3.52	2.54	1.82	1.42	1.18	0.794	0.656
1.70V/cell	21.9	15.4	12.5	10.9	9.84	8.72	6.14	4.78	3.64	2.65	1.86	1.45	1.20	0.806	0.663
1.67V/cell	23.5	16.1	13.0	11.3	10.2	9.02	6.34	4.95	3.74	2.71	1.90	1.49	1.23	0.817	0.670
1.60V/cell	24.9	16.8	13.6	11.7	10.5	9.31	6.60	5.14	3.84	2.80	1.96	1.53	1.25	0.827	0.676

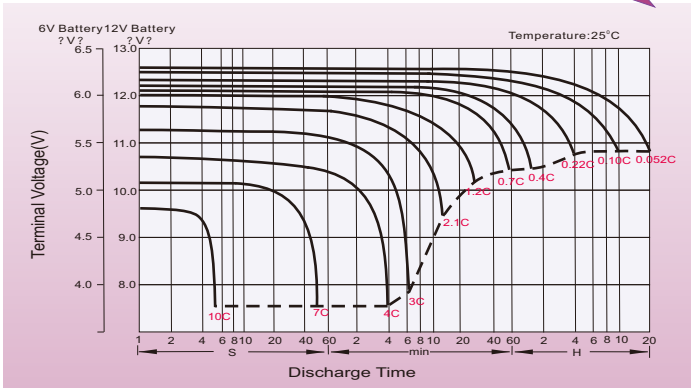
#### Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	25min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	33.2	24.7	21.2	18.7	16.7	14.7	10.6	8.36	6.35	4.78	3.45	2.71	2.25	1.52	1.26
1.80V/cell	34.8	26.0	22.1	19.3	17.5	15.5	11.2	8.81	6.75	4.94	3.57	2.81	2.33	1.60	1.33
1.75V/cell	37.4	27.3	22.8	20.2	18.2	16.2	11.6	9.10	7.00	5.08	3.64	2.86	2.38	1.61	1.34
1.70V/cell	39.6	28.4	23.5	20.8	18.8	16.8	12.0	9.42	7.21	5.26	3.73	2.92	2.43	1.63	1.35
1.67V/cell	41.7	29.2	24.0	21.3	19.4	17.2	12.3	9.69	7.37	5.37	3.80	2.98	2.47	1.65	1.36
1.60V/cell	43.3	29.9	24.6	21.7	19.7	17.6	12.7	10.0	7.51	5.51	3.88	3.04	2.51	1.67	1.37

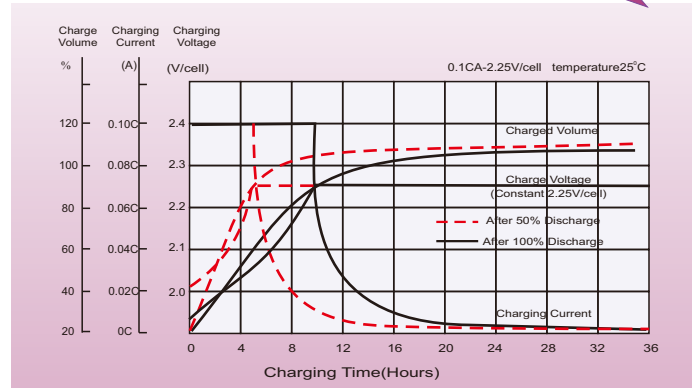
## High Power AGM Battery-UCP Series

### Characteristic Curve

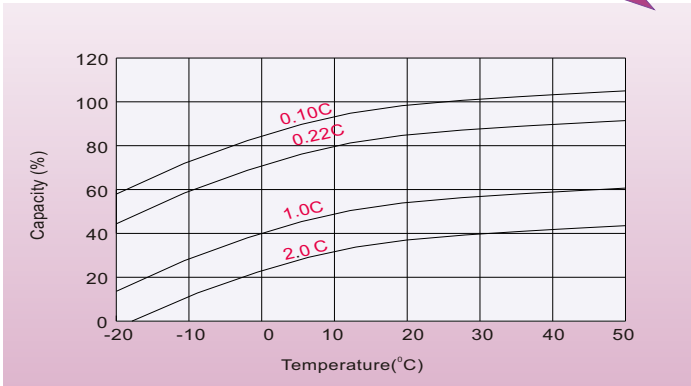
#### Discharge Characteristics



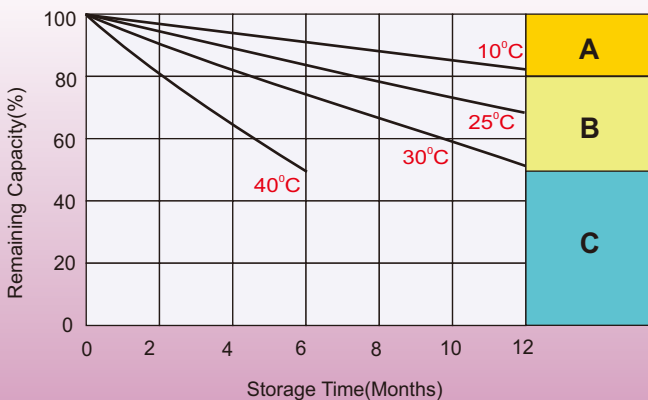
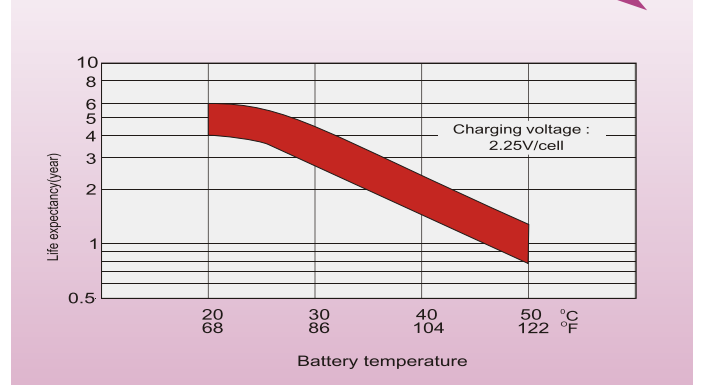
#### Float Charging Characteristics



#### Temperature Effects in Relation to Battery Capacity



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



#### 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 volatge 2.25V/cell.
  2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
  3. Charged for 8~10hours 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.