

## High Power AGM Battery-UCP Series

# UCP12-30 (12V30W)

## 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

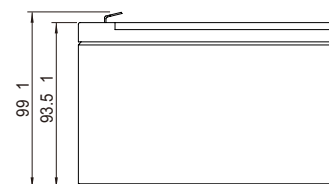
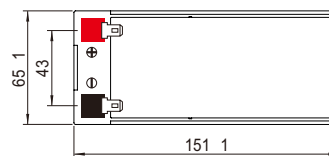


## Features

- 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

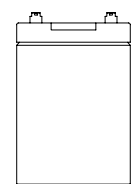
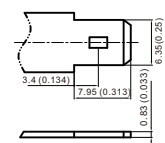
### Layout

Unit: mm



### Terminal

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

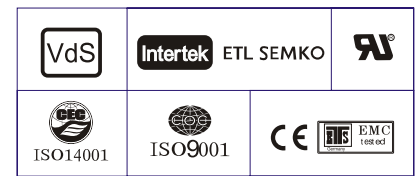


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# UCP12-30 (12V30W)

### 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	7.05 AH/0.705A (10hr, 1.80V/cell, 25°C/77°F)
	6.8 AH/0.85A (8hr, 1.80V/cell, 25°C/77°F)
	6.3 AH/1.26A (5hr, 1.75V/cell, 25°C/77°F)
	5.73 AH/1.91A (3hr, 1.75V/cell, 25°C/77°F)
	5.33AH/5.33A (1hr, 1.60V/cell, 25°C/77°F)
Approx Weight	Approx 2.23 kg (4.92lbs)
Terminal	T2
Container Material	ABS
Max. Discharge Current	105A (5s)
Internal Resistance	Approx 20.0mΩ
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	24.4	16.4	13.3	11.2	9.52	8.19	5.83	4.57	3.41	2.56	1.84	1.44	1.19	0.802	0.661
1.80V/cell	26.9	17.5	13.9	11.8	10.0	8.62	6.10	4.77	3.64	2.66	1.91	1.50	1.24	0.844	0.700
1.75V/cell	29.0	18.5	14.8	12.4	10.5	9.06	6.36	4.94	3.79	2.74	1.96	1.53	1.27	0.855	0.707
1.70V/cell	30.7	19.7	15.6	13.0	10.9	9.39	6.62	5.15	3.92	2.85	2.01	1.57	1.30	0.868	0.714
1.67V/cell	32.6	20.6	16.2	13.5	11.4	9.72	6.83	5.33	4.03	2.92	2.05	1.60	1.32	0.880	0.722
1.60V/cell	34.4	21.5	16.9	14.0	11.8	10.2	7.15	5.54	4.14	3.02	2.11	1.65	1.35	0.891	0.728

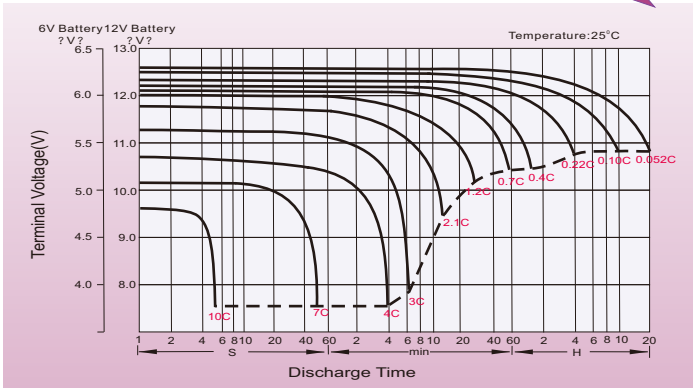
#### Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	25min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	46.1	31.4	25.7	21.8	18.6	16.1	11.6	9.14	6.84	5.15	3.72	2.92	2.42	1.64	1.35
1.80V/cell	50.2	33.1	26.7	22.8	19.5	16.9	12.1	9.49	7.27	5.32	3.84	3.02	2.51	1.72	1.43
1.75V/cell	53.2	34.6	28.1	23.8	20.3	17.6	12.5	9.80	7.54	5.47	3.92	3.09	2.56	1.74	1.44
1.70V/cell	55.5	36.3	29.2	24.8	20.9	18.1	12.9	10.1	7.77	5.67	4.02	3.15	2.61	1.76	1.46
1.67V/cell	58.0	37.4	30.0	25.3	21.5	18.6	13.3	10.4	7.94	5.79	4.09	3.21	2.66	1.78	1.47
1.60V/cell	59.8	38.2	30.6	26.0	22.1	19.2	13.7	10.8	8.08	5.93	4.18	3.28	2.71	1.80	1.48

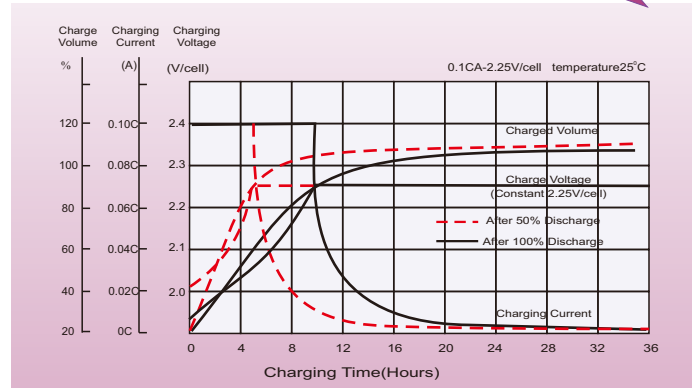
## High Power AGM Battery-UCP Series

### Characteristic Curve

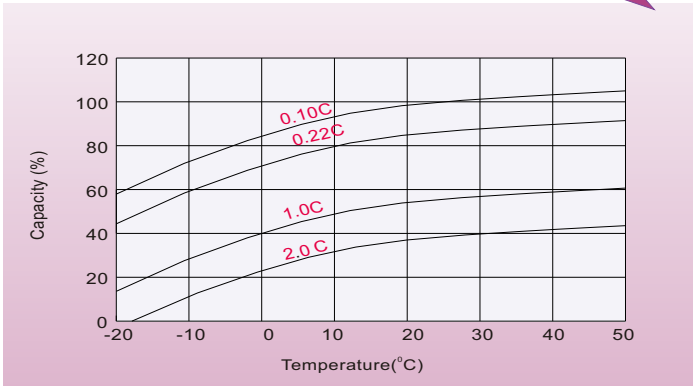
#### Discharge Characteristics



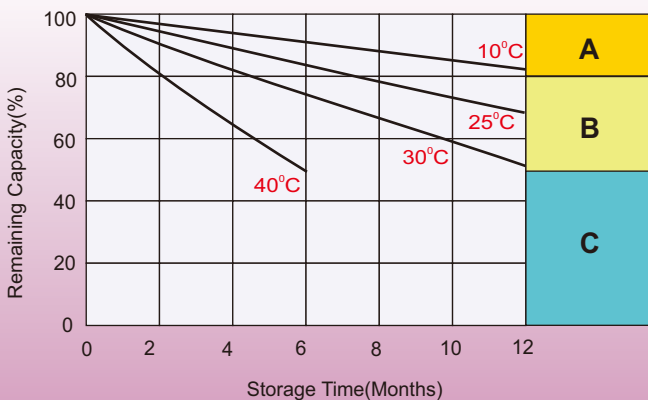
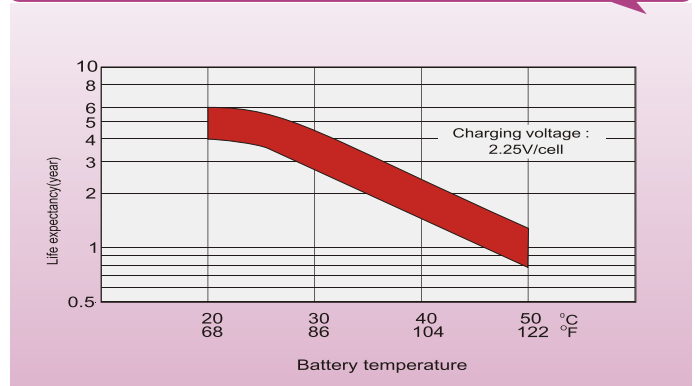
#### Float Charging Characteristics



#### 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.