

High Power AGM Battery-UCP Series

UCP12-300 (12V300W)

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

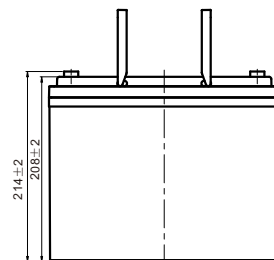
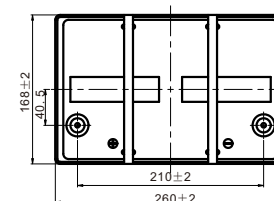


Features

- High Performance: 10~12 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

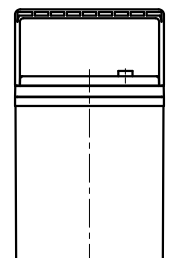
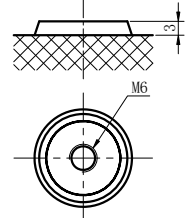
Unit: mm



Terminal

T6 Terminal

Unit: mm [inches]

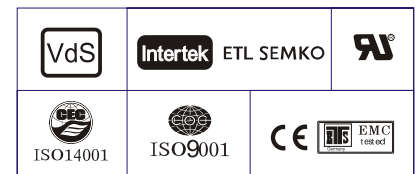
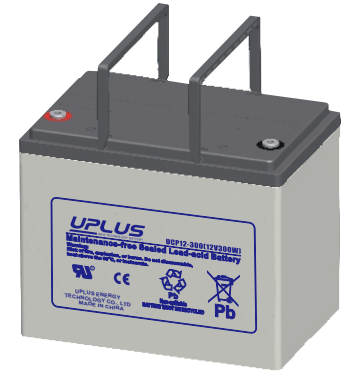


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UCP12-300 (12V300W)

Specification

Nominal Voltage	12V
Dimension	Length 260±3mm (10.24 inches)
	Width 168±2mm (6.61 inches)
	Container Height 208±3mm (8.19inches)
	Total Height (with Terminal) 214±2mm (8.42inches)
Rated Capacity	80.0 AH/8.0A (10hr, 1.80V/cell, 25°C/77°F)
	76.4 AH/9.55A (8hr, 1.80V/cell, 25°C/77°F)
	66.5 AH/13.3A (5hr, 1.75V/cell, 25°C/77°F)
	57.0AH/19.0A (3hr, 1.75V/cell, 25°C/77°F)
	50.3 AH/50.3A (1hr, 1.60V/cell, 25°C/77°F)
Approx Weight	Approx 24.2 kg (53.4lbs)
Terminal	T6
Container Material	ABS
Max. Discharge Current	1200A (5s)
Internal Resistance	Approx 5.0mΩ
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	167.4	130.6	110.3	95.0	79.6	69.3	49.8	39.3	28.4	23.0	17.2	14.3	12.4	9.30	7.85
1.80V/cell	190.8	148.0	122.4	103.7	86.3	74.7	53.9	42.5	30.5	24.6	18.3	15.0	13.0	9.55	8.00
1.75V/cell	214.1	164.3	134.7	112.3	93.1	80.3	57.2	45.0	32.2	25.8	19.0	15.4	13.3	9.72	8.08
1.70V/cell	236.7	179.1	147.6	120.4	99.4	85.4	60.2	47.4	33.6	26.7	19.6	15.8	13.6	9.85	8.16
1.67V/cell	253.8	192.6	159.1	126.9	104.0	88.8	62.7	48.9	34.7	27.5	20.0	16.2	13.9	9.99	8.23
1.60V/cell	275.3	206.1	167.4	132.1	107.8	91.7	64.4	50.3	35.5	28.1	20.4	16.5	14.1	10.12	8.32

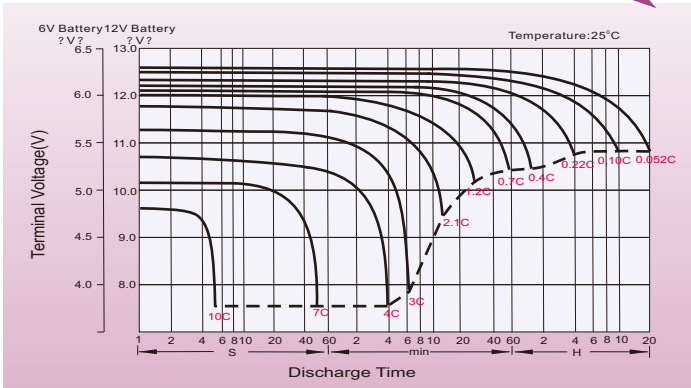
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	25min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	314.0	248.8	212.9	185.0	155.8	136.5	98.9	78.6	57.0	46.2	34.7	28.9	25.3	19.0	16.1
1.80V/cell	355.5	280.0	235.0	201.0	168.1	146.3	106.6	84.5	61.0	49.2	36.7	30.3	26.3	19.5	16.4
1.75V/cell	396.3	309.0	257.2	216.5	180.2	156.1	112.5	89.3	64.0	51.4	38.0	30.9	26.9	19.8	16.5
1.70V/cell	434.9	335.0	279.9	230.6	191.4	165.3	117.7	93.5	66.5	53.0	39.1	31.7	27.4	20.0	16.6
1.67V/cell	462.2	356.8	299.0	241.1	198.7	170.5	121.7	95.8	68.3	54.4	39.8	32.5	27.8	20.2	16.8
1.60V/cell	495.8	378.6	311.8	248.6	204.1	174.4	123.9	97.7	69.3	55.1	40.4	32.9	28.3	20.4	16.9

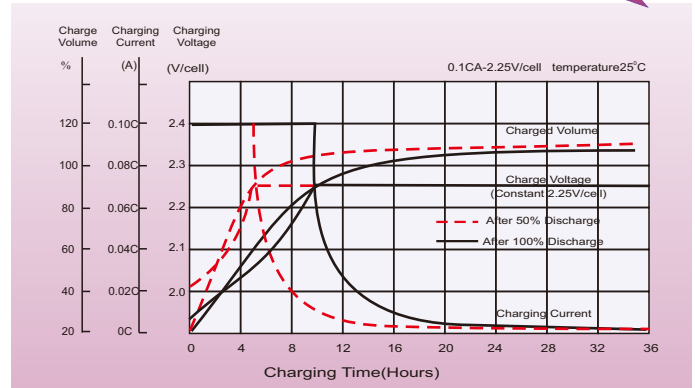
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Characteristic Curve

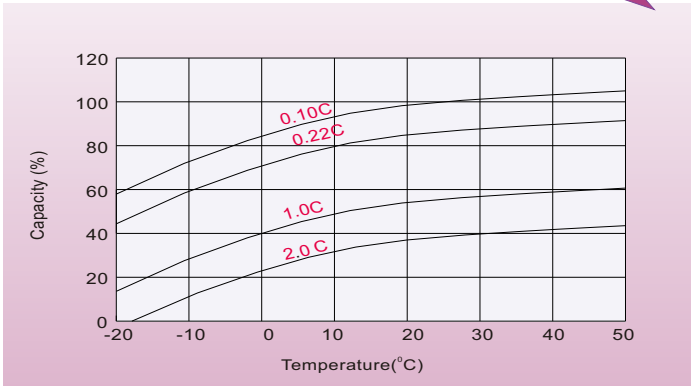
Discharge Characteristics



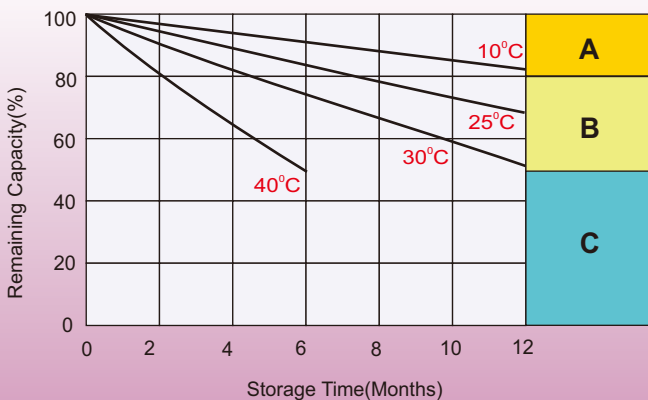
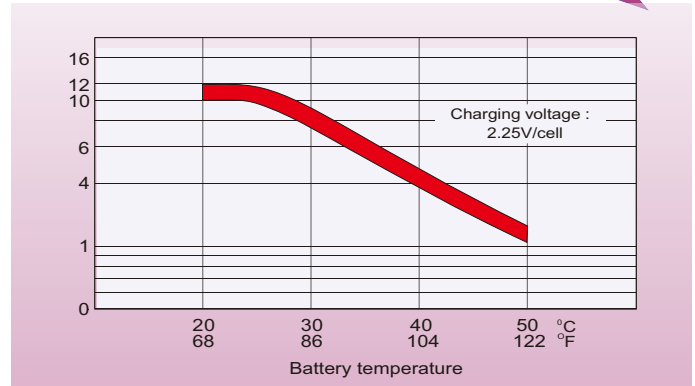
Float Charging Characteristics



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.