

High Power AGM Battery-UCP Series

UCP12-740 (12V740W)

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

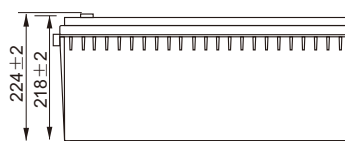
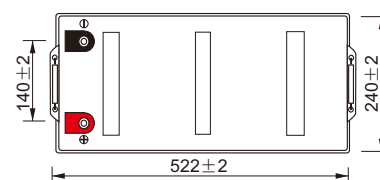


Features

- 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

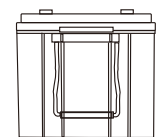
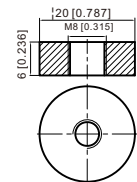
Layout

Unit: mm



Terminal

T11 Terminal
Unit: mm [inches]

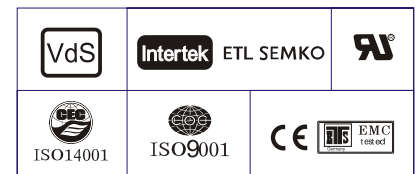


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Specification

Nominal Voltage	12V
Dimension	Length 522±3mm (20.55 inches)
	Width 240±2mm (9.45 inches)
	Container Height 218±2mm (8.58inches)
	Total Height (with Terminal) 224±2mm (8.82inches)
Rated Capacity	220.0 AH/22.0A (10hr, 1.80V/cell, 25°C/77°F)
	211.2 AH/26.4A (8hr, 1.80V/cell, 25°C/77°F)
	196.0 AH/39.2A (5hr, 1.75V/cell, 25°C/77°F)
	170.4 AH/56.8A (3hr, 1.75V/cell, 25°C/77°F)
	145.2 AH/145.2A (1hr, 1.60V/cell, 25°C/77°F)
Approx Weight	Approx 64.0 kg (141.1lbs)
Terminal	T11
Container Material	ABS
Max. Discharge Current	2200A (5s)
Internal Resistance	Approx 2.6mΩ
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	382.8	322.1	297.4	268.0	229.4	198.4	144.9	116.2	84.9	69.3	52.3	42.9	36.5	25.8	21.5
1.80V/cell	454.1	363.1	323.8	287.8	244.7	211.6	153.1	122.9	89.7	73.0	54.6	44.7	37.9	26.4	22.0
1.75V/cell	535.9	409.3	353.8	309.5	262.7	226.2	162.8	130.5	94.4	76.3	56.8	46.3	39.2	26.9	22.2
1.70V/cell	596.6	442.2	379.3	326.0	276.4	239.8	171.9	135.7	98.0	79.1	58.4	47.5	39.9	27.3	22.4
1.67V/cell	650.0	476.5	402.2	342.5	289.9	250.4	178.1	140.8	101.3	81.5	60.1	48.5	40.6	27.6	22.6
1.60V/cell	715.4	512.2	423.3	357.1	301.5	260.0	183.9	145.2	104.2	83.7	61.1	49.2	41.3	27.9	23.0

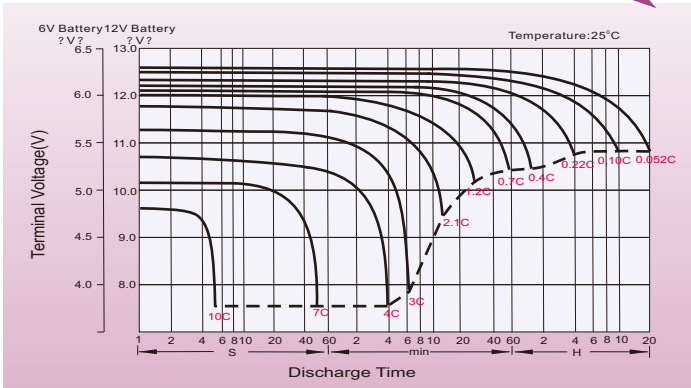
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	25min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	717.8	613.5	574.0	522.2	449.3	390.6	287.9	232.3	170.3	139.3	105.5	87.0	74.2	52.7	44.0
1.80V/cell	840.0	683.5	618.6	555.7	475.9	414.4	302.7	244.8	179.1	146.3	109.8	90.3	76.8	53.8	45.0
1.75V/cell	976.3	759.5	668.3	591.7	506.3	439.5	320.2	258.8	187.8	152.4	113.9	93.3	79.1	54.7	45.4
1.70V/cell	1068.8	809.4	707.6	616.7	527.8	462.2	336.1	267.7	194.0	157.3	116.8	95.4	80.5	55.3	45.7
1.67V/cell	1140.3	857.7	740.0	640.5	548.0	478.5	345.6	275.8	199.5	161.4	119.8	97.1	81.5	55.8	46.1
1.60V/cell	1223.4	903.3	764.8	657.9	562.3	490.9	353.1	282.1	203.5	164.4	120.9	98.0	82.7	56.4	46.7

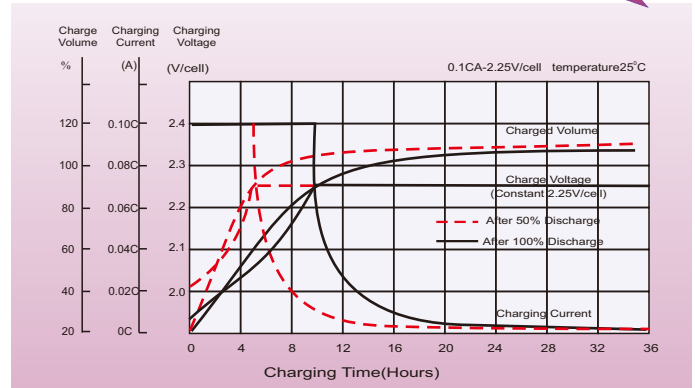
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Characteristic Curve

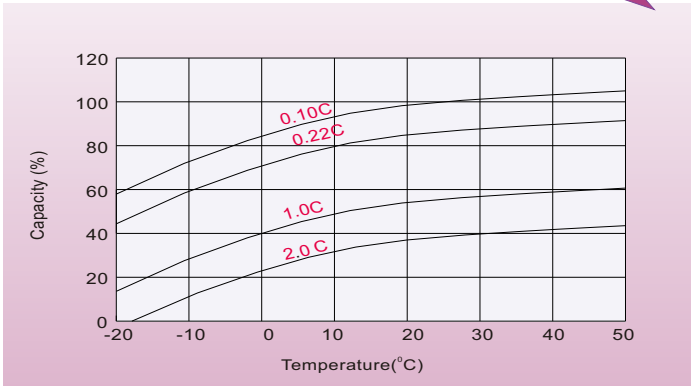
Discharge Characteristics



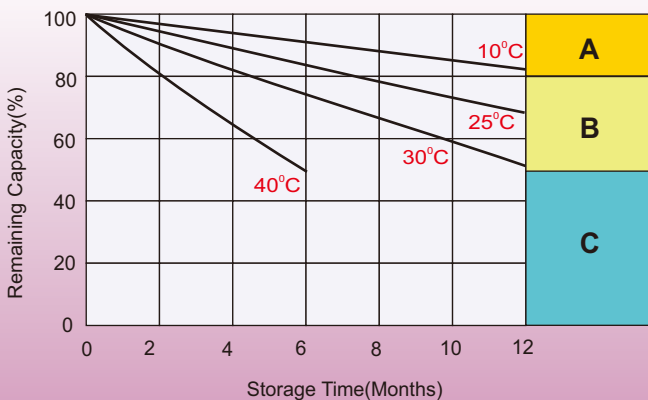
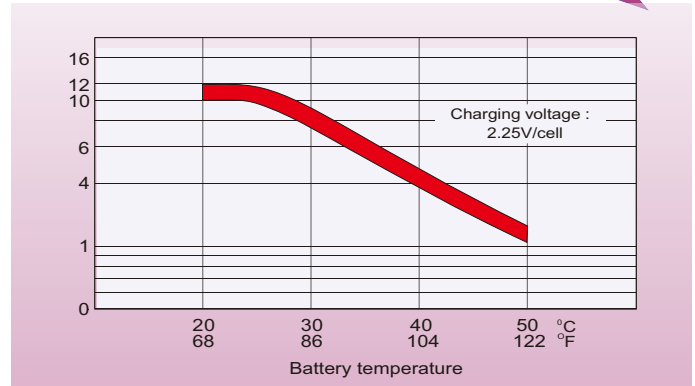
Float Charging Characteristics



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.