

## HPX12425 (12V78.6AH)

### Specification

Nominal Voltage	12V
Watts(10min Rate)	423.4 Watts at 1.60V/cell
Dimension	Length 260± 3mm (10.2 inches)
	Width 168± 2mm (6.61 inches)
	Container Height 208± 3mm (8.19 inches)
	Total Height (with Terminal) 211± 3mm (8.31 inches)
Approx Weight	Approx 24.0 kg (52.92lbs)
Terminal	T6
Container Material	ABS
Rated Capacity	78.60 AH/7.86A (10hr, 1.80V/cell, 25°C/77°F)
	75.68 AH/9.46A (8hr, 1.80V/cell, 25 °C/77°F)
	71.00 AH/14.2A (5hr, 1.75V/cell, 25°C/77°F)
	65.70 AH/14.6A (3hr, 1.75V/cell, 25°C/77°F)
	58.8 AH/58.8A (1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	1230A (5s)
Internal Resistance	Approx 4.5mΩ
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)
Cycle Use	Initial Charging Current less than 24.6A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C
	Standby Use No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C
Capacity affected by Temperature	40°C (104°F) 103%
	25°C (77°F) 100%
	0°C (32°F) 86%
Self Discharge	HPX 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.

### Applications

- ◆ UPS (High rate)
- ◆ High power backup supply
- ◆ Emergency power supply
- ◆ Emergency lighting
- ◆ Electric starting

### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	3min	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h
1.85V/cell	226.4	187.0	144.2	126.0	110.2	85.0	63.6	51.2	29.1	20.7	16.2	13.5	11.6	9.19	7.70
1.80V/cell	245.8	214.5	158.9	138.1	118.8	89.5	65.9	52.9	30.0	21.4	16.7	13.9	12.0	9.46	7.86
1.75V/cell	262.0	244.0	178.4	150.2	126.0	93.3	68.0	54.3	30.9	21.9	17.1	14.2	12.3	9.66	8.00
1.70V/cell	287.0	268.6	193.4	160.1	134.1	98.1	70.9	55.9	31.4	22.4	17.6	14.6	12.5	9.82	8.14
1.67V/cell	313.5	297.2	210.6	171.2	140.2	102.3	73.0	57.5	32.0	22.8	17.8	14.8	12.6	10.0	8.28
1.60V/cell	345.9	326.7	227.3	180.7	147.6	106.3	75.7	58.8	32.6	23.1	18.2	15.1	12.9	10.2	8.43

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

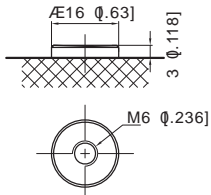
F.V/Time	3min	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h
1.85V/cell	434.7	363.7	282.0	247.8	217.9	168.9	127.0	102.5	58.4	41.9	32.9	27.4	23.7	18.8	15.8
1.80V/cell	468.7	413.0	307.7	269.0	232.7	176.4	130.6	105.2	59.9	42.9	33.7	28.1	24.3	19.3	16.1
1.75V/cell	491.9	465.0	342.2	290.0	244.5	182.2	133.6	107.2	61.3	43.7	34.3	28.6	24.7	19.6	16.3
1.70V/cell	544.0	506.0	366.8	305.4	257.5	189.6	137.9	109.5	61.9	44.4	34.9	29.1	25.0	19.8	16.5
1.67V/cell	584.0	555.3	396.5	324.6	267.6	196.7	141.4	112.0	62.7	44.9	35.3	29.4	25.2	20.0	16.6
1.60V/cell	636.1	603.6	423.4	339.1	279.0	202.3	145.1	113.5	63.3	45.1	35.7	29.7	25.5	20.2	16.8

Specifications subject to change without notice.

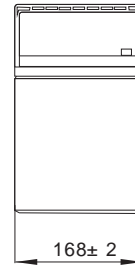
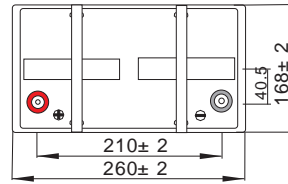
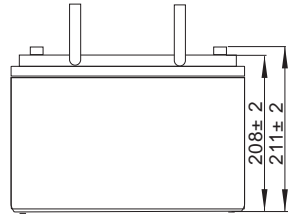
# Dimensions

## T6 Terminal

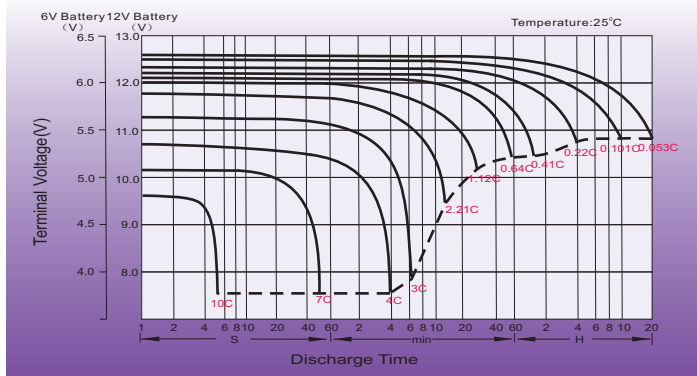
Unit: mm [inches]



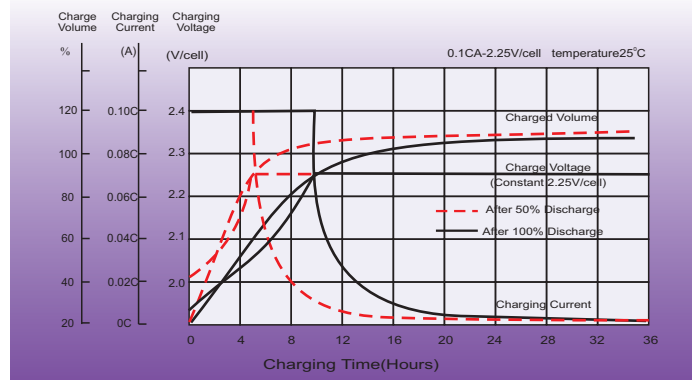
Unit: mm [inches]



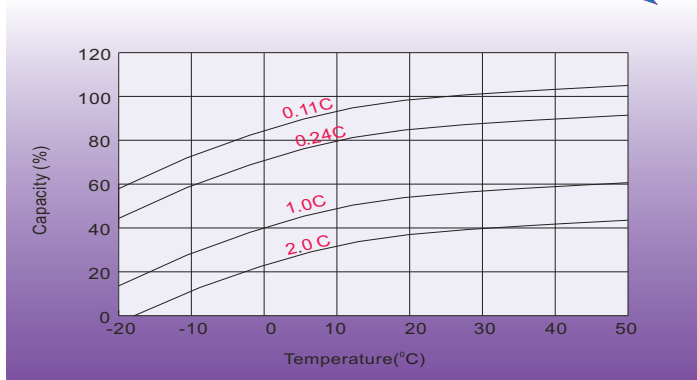
## Discharge Characteristics



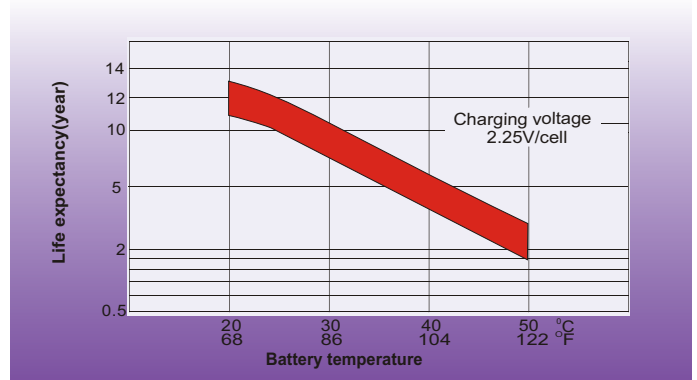
## Float Charging Characteristics



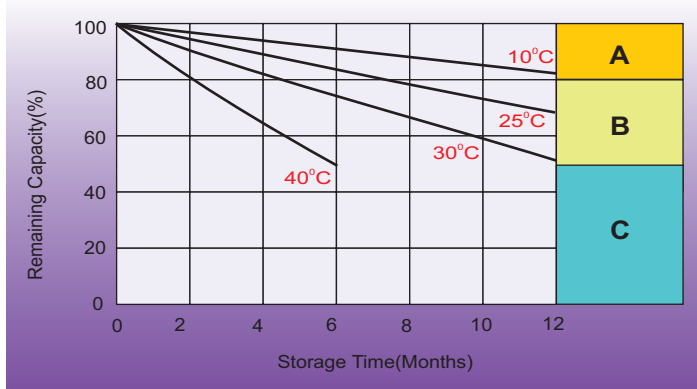
## Temperature Effects in Relation to Battery Capacity



## 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.