

## HPX12200 (12V33.5AH)

### Specification

Nominal Voltage	12V
Watts(10min Rate)	203 Watts at 1.60V/cell
Dimension	Length 195± 2mm 7.68 inches
	Width 130± 2mm 5.12 inches
	Container Height 164± 2mm 6.46 inches
	Total Height (with Terminal) 167± 2mm 6.57 inches
Approx Weight	Approx 10.2 kg (22.5lbs)
Terminal	T6
Container Material	ABS
Rated Capacity	33.50 AH/ 3.35 A (10hr ,1.80V/cell,25°C/77°F)
	32.24 AH/ 4.03 A (8hr,1.80V/cell,25 °C/77°F)
	30.75 AH/ 6.15A (5hr,1.75V/cell,25°C/77°F)
	28.62 AH/ 9.54A (3hr,1.75V/cell,25°C/77°F)
	26.80 AH/ 26.8A (1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	630A (5s)
Internal Resistance	Approx 7m Ω
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 10.5A.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	122.3	102.3	73.7	59.1	49.4	37.9	28.3	22.6	12.7	9.04	7.06	5.85	5.01	3.93	3.26
1.80V/cell	134.1	118.2	82.7	65.2	53.7	40.7	29.9	23.8	13.2	9.31	7.28	6.02	5.15	4.03	3.35
1.75V/cell	140.5	132.8	89.9	70.3	57.2	42.7	31.2	24.7	13.5	9.54	7.46	6.15	5.25	4.11	3.41
1.70V/cell	154.8	144.0	96.6	74.9	60.5	44.6	32.3	25.5	13.9	9.70	7.60	6.27	5.37	4.20	3.48
1.67V/cell	164.1	156.0	103.3	79.1	63.6	46.4	33.3	26.2	14.2	10.0	7.78	6.41	5.48	4.31	3.54
1.60V/cell	175.8	166.8	109.2	82.7	66.6	48.4	34.4	26.8	14.6	10.2	7.98	6.58	5.63	4.40	3.62

### 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	240.9	199.0	144.2	116.2	97.6	75.4	56.4	45.2	25.6	18.3	14.3	11.9	10.2	8.05	6.71
1.80V/cell	260.8	227.6	160.2	127.1	105.1	80.1	59.3	47.4	26.3	18.7	14.7	12.2	10.4	8.22	6.85
1.75V/cell	271.4	253.0	172.4	135.7	111.1	83.4	61.2	48.9	26.9	19.0	14.9	12.4	10.6	8.33	6.94
1.70V/cell	289.8	271.2	183.3	142.9	116.2	86.3	62.9	49.9	27.4	19.3	15.1	12.5	10.8	8.45	7.03
1.67V/cell	307.1	291.5	194.5	150.0	121.4	89.3	64.5	51.2	28.0	19.7	15.4	12.7	10.9	8.62	7.12
1.60V/cell	326.2	308.1	203.4	155.2	125.9	92.2	65.9	51.7	28.3	20.0	15.7	13.0	11.1	8.73	7.21

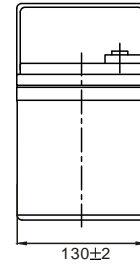
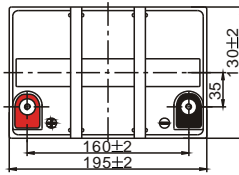
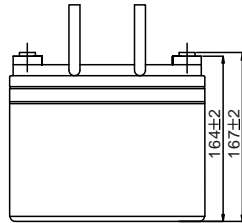
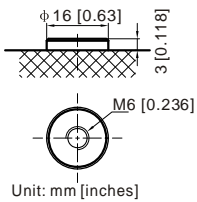
Specifications subject to change without notice.



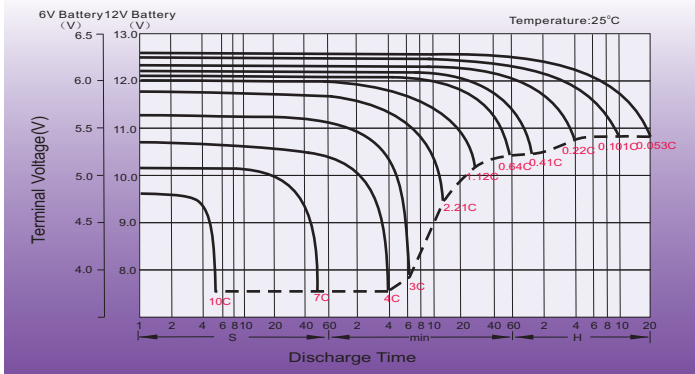
# Dimensions

## T6 Terminal

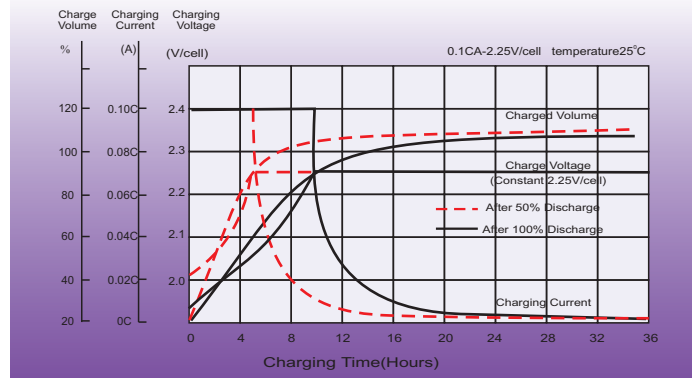
Unit: mm [inches]



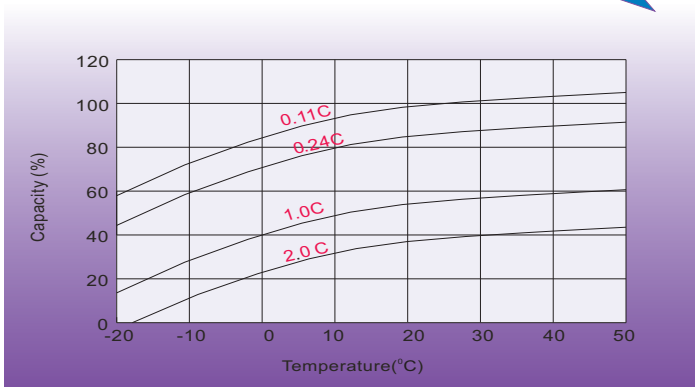
## Discharge Characteristics



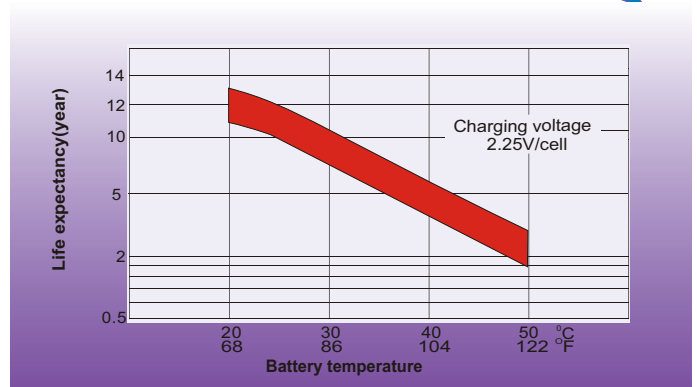
## Float Charging Characteristics



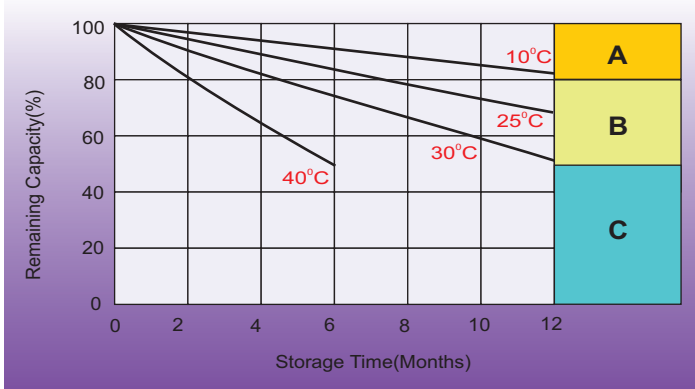
## Temperature Effects in Relation to Battery Capacity



## 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.