TRIATHLON®
INTELLIGENT SYSTEMS

HPX SERIES-HIGH POWER EXTRA RATE

HPX12670 (12V147AH)

Specification

Nominal Voltage	12V	
Watts(10min Rate)	667.5 Watts at 1.60V/cell	
Dimension	Length	335±3mm (13.2inches)
	Width	172±2mm (6.77inches)
	Container Height	275±3mm (10.8inches)
	Total Height (with Terminal)	278±3mm (10.9inches)
Approx Weight	Approx 42.4 kg (93.5lbs)	
Terminal	T8	
Container Material	ABS	
Rated Capacity	147.0AH/14.7A	(10hr ,1.80V/cell,25°C/77°F)
	140.8 AH/17.6A	(8hr,1.80V/cell,25 °C/77°F)
	130.5 AH/26.1A	(5hr,1.75V/cell,25°C/77°F)
	120.3 AH/40.1A	(3hr,1.75V/cell,25°C/77°F)
	109.5 AH/109.5A	(1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	2015A (5s)	
Internal Resistance	Approx 3.1mΩ	
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 46.5 A.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	342.3	282.7	227.9	197.5	173.4	138.3	106.0	87.0	51.5	37.2	29.6	24.6	21.4	17.1	14.3
1.80V/cell	375.2	327.4	252.0	217.6	192.0	150.7	114.1	92.1	54.0	38.8	30.7	25.5	22.1	17.6	14.7
1.75V/cell	409.4	381.3	281.8	241.2	207.9	161.8	121.1	97.3	56.3	40.1	31.5	26.1	22.6	17.9	15.0
1.70V/cell	455.1	425.9	309.7	265.0	225.9	173.3	127.9	102.0	58.2	41.2	32.3	26.7	23.0	18.3	15.3
1.67V/cell	492.5	466.9	341.3	288.5	240.4	180.8	133.3	105.6	60.1	42.4	33.1	27.3	23.5	18.7	15.5
1.60V/cell	537.7	507.8	369.2	304.4	253.4	190.0	138.9	109.5	61.7	43.2	34.0	28.0	24.2	19.1	15.9

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

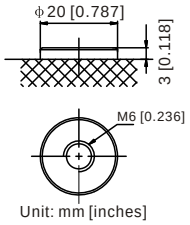
F.V/Time	3min	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h
1.85V/cell	642.7	537.7	438.4	382.7	337.8	271.0	209.1	172.5	102.8	74.4	59.5	49.8	43.5	34.9	29.5
1.80V/cell	698.4	615.4	480.8	417.8	371.3	293.0	223.2	181.3	106.8	77.1	61.2	51.1	44.4	35.6	30.0
1.75V/cell	751.3	710.1	530.7	458.9	398.9	312.2	235.1	190.2	110.7	79.2	62.5	52.0	45.2	36.1	30.4
1.70V/cell	844.5	785.4	577.9	499.2	430.2	332.1	246.5	197.9	113.6	80.8	63.8	53.0	45.8	36.7	30.9
1.67V/cell	896.0	852.0	630.1	539.0	454.3	344.4	255.5	203.8	116.8	82.8	65.0	53.9	46.6	37.2	31.2
1.60V/cell	957.8	908.9	667.5	558.6	468.8	354.4	261.2	207.5	117.7	83.9	65.5	54.3	47.1	37.5	31.3

Specifications subject to change without notice.

Dimensions

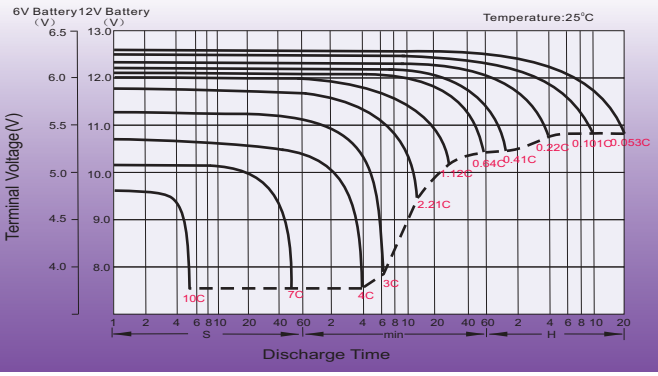
T8 Terminal

Unit: mm [inches]

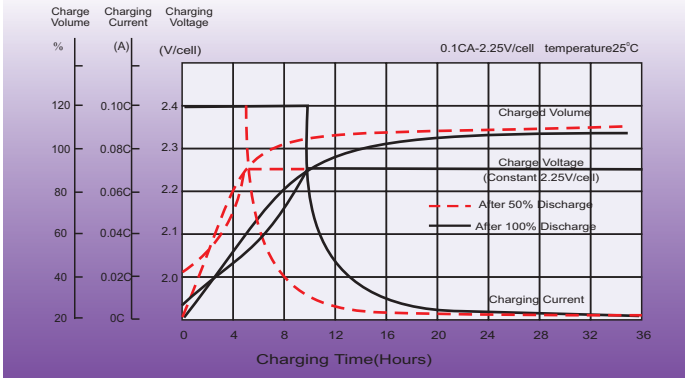


Unit: mm [inches]

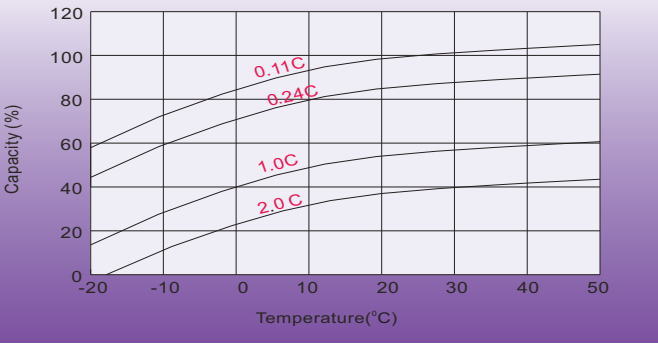
Discharge Characteristics



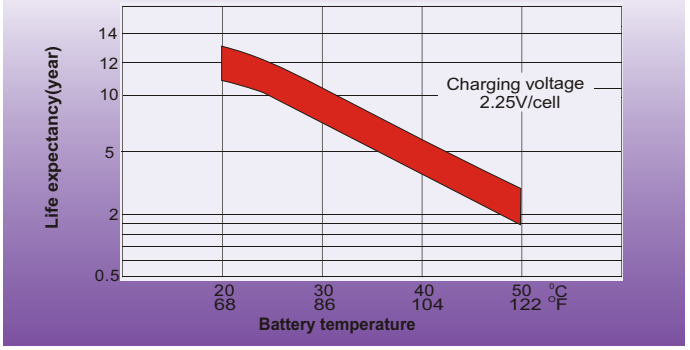
Float Charging Characteristics

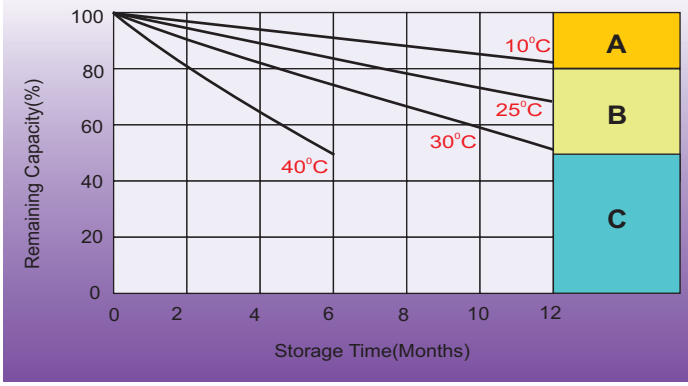


Temperature Effects in Relation to Battery Capacity



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 limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

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