

UP-HR38-12



Specification		
Nominal Voltage	12V	
Watts(15min Rate)	126.3 W at 1.67V/cell	
Dimension	Length	197±2mm (7.76 inches)
	Width	165±2mm (6.50 inches)
	Container Height	170±2mm (6.69 inches)
	Total Height (with Terminal)	170±2mm (6.69 inches)
	Approx Weight	Approx 13.2 kg (29.1lbs)
Terminal	T6 / T10 / T12	
Container Material	ABS	
Rated Capacity	38.7 AH/3.87A	(10hr, 1.80V/cell, 25°C/77°F)
	36.6 AH/4.58A	(8hr, 1.80V/cell, 25°C/77°F)
	32.8 AH/6.56A	(5hr, 1.75V/cell, 25°C/77°F)
	30.0 AH/9.99A	(3hr, 1.75V/cell, 25°C/77°F)
	25.3 AH/25.3A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	456A (5s)	
Internal Resistance	Approx 10mΩ	
Operating Temperature Range	Discharge: -15~50°C (5~122°F)	
	Change : 0~40°C (32~104°F)	
	Storage : -15~40°C (5~104°F)	
Nominal Operating Temperature Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 11.4A. 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	Batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required.	

Constant Current Discharge (Amperes) at 25°C (77°F)															
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	66.0	52.9	48.8	39.9	31.5	23.8	20.2	12.1	9.35	7.41	6.07	5.26	4.40	3.72	2.04
1.80V/cell	85.9	65.6	57.2	45.7	36.1	26.8	21.9	12.8	9.80	7.76	6.39	5.53	4.58	3.87	2.06
1.75V/cell	96.9	72.1	62.6	49.2	37.4	27.8	22.9	13.3	9.99	7.92	6.56	5.67	4.66	3.91	2.08
1.70V/cell	106.7	78.6	66.7	51.7	39.0	28.9	23.7	13.9	10.2	8.14	6.73	5.79	4.72	3.94	2.12
1.65V/cell	117.7	84.8	71.0	54.9	41.1	29.7	24.4	14.2	10.7	8.42	6.92	5.93	4.79	4.03	2.14
1.60V/cell	129.8	92.1	76.0	58.5	43.5	30.9	25.3	14.6	11.0	8.68	7.14	6.05	4.84	4.07	2.15

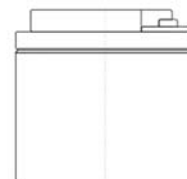
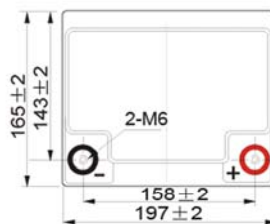
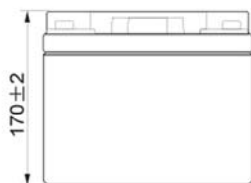
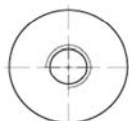
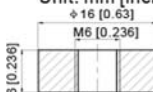
Constant Power Discharge (Watts) at 25°C (77°F)															
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	120.6	97.7	91.1	75.1	60.0	45.6	38.8	23.5	18.3	14.6	12.1	10.5	8.61	7.36	4.05
1.80V/cell	155.5	119.7	105.3	85.0	67.8	51.1	42.0	24.7	19.0	15.2	12.7	11.1	8.93	7.63	4.09
1.75V/cell	171.6	129.4	113.7	90.5	69.7	52.6	43.7	25.5	19.3	15.5	13.0	11.3	9.07	7.70	4.12
1.70V/cell	183.7	137.8	119.7	94.4	72.3	54.4	45.0	26.5	19.8	15.9	13.3	11.5	9.19	7.77	4.20
1.65V/cell	199.7	147.4	126.3	99.5	75.6	55.3	46.2	27.1	20.6	16.4	13.6	11.7	9.30	7.92	4.24
1.60V/cell	215.1	156.5	132.8	104.9	79.2	57.3	47.5	27.8	21.1	16.9	14.0	11.9	9.38	7.99	4.26



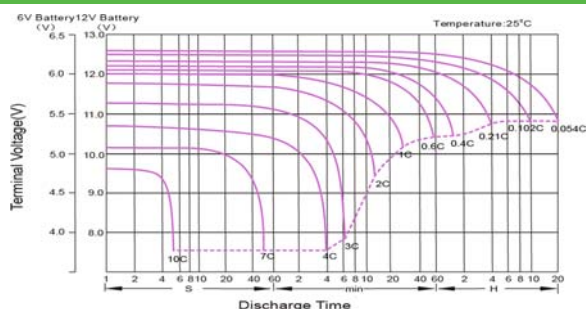
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Dimensions

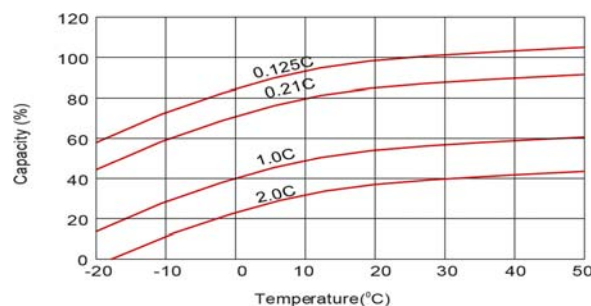
■ T6 Terminal
Unit: mm [inches]



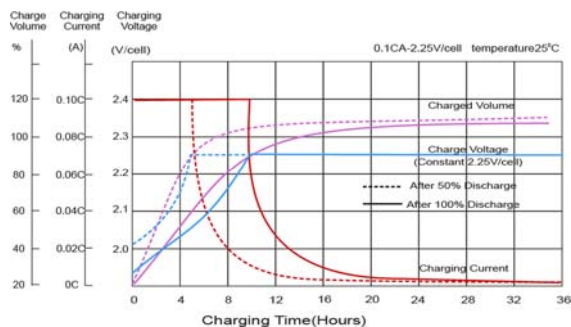
Discharge Characteristics



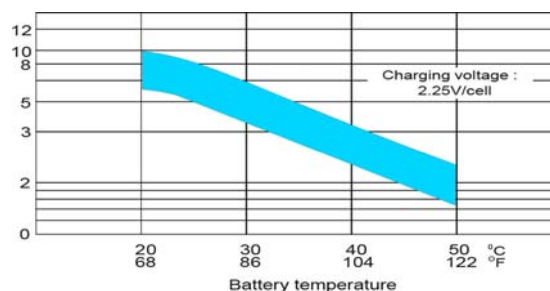
Temperature Effects in Relation to Battery Capacity



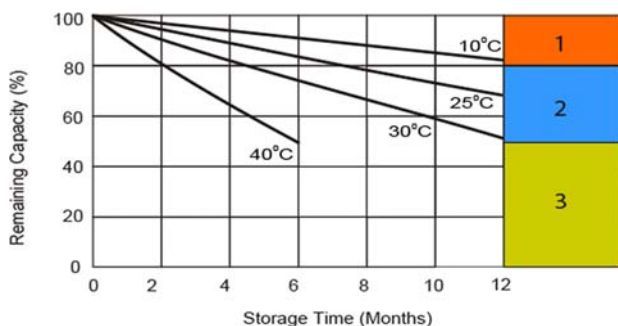
Float Charging Characteristics



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics



- 1** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required).
- 2** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8-10 hours at limited current 0.05CA.
- 3** Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.

