

UP-DC38-12



Specification		
Nominal Voltage	12V	
Nominal Capacity (10HR)	38.0AH	
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 14.5 Kg (32.0 lbs)
Terminal	T6	
Container Material	ABS	
Rated Capacity	40.7 AH/2.04A	(20hr, 1.80V/cell, 25°C/77°F)
	38.0 AH/3.80A	(10hr, 1.80V/cell, 25°C/77°F)
	33.3AH/6.67A	(5hr, 1.75V/cell, 25°C/77°F)
	30.2 AH/10.1A	(3hr, 1.75V/cell, 25°C/77°F)
	24.5 AH/24.5A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	456A (5s)	
Internal Resistance	Approx 9.0mΩ	
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	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	55.6	46.8	40.9	29.4	23.4	19.0	11.8	9.19	7.44	6.05	5.28	4.31	3.59	2.02
1.80V/cell	71.1	56.6	48.4	34.7	27.2	21.3	12.9	9.89	7.95	6.49	5.66	4.57	3.80	2.04
1.75V/cell	78.1	61.8	52.0	36.1	28.2	22.2	13.3	10.1	8.12	6.67	5.81	4.65	3.84	2.06
1.70V/cell	85.1	66.0	54.7	37.5	29.3	22.9	13.9	10.4	8.34	6.83	5.94	4.71	3.88	2.09
1.65V/cell	91.9	70.1	58.1	39.6	30.1	23.7	14.3	10.8	8.63	7.02	6.06	4.79	3.96	2.12
1.60V/cell	99.8	75.0	61.9	41.8	31.4	24.5	14.7	11.1	8.90	7.25	6.20	4.83	4.00	2.13

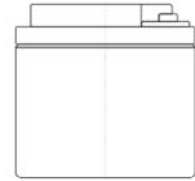
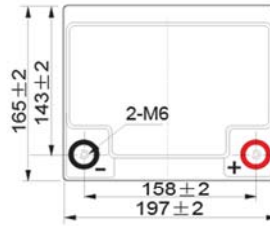
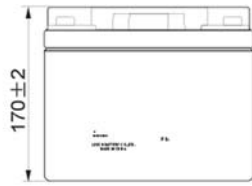
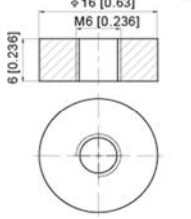
Constant Power Discharge (Watts) at 25°C (77°F)														
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	103.8	88.3	78.0	56.6	45.2	36.8	23.0	18.0	14.6	11.9	10.42	8.52	7.11	4.04
1.80V/cell	130.9	105.1	90.8	65.9	52.2	41.0	24.9	19.2	15.5	12.7	11.14	9.02	7.52	4.07
1.75V/cell	142.0	113.6	96.8	68.1	53.9	42.7	25.8	19.5	15.8	13.0	11.43	9.17	7.59	4.10
1.70V/cell	152.0	120.4	101.2	70.6	55.9	44.0	26.7	20.0	16.2	13.3	11.65	9.29	7.66	4.18
1.65V/cell	163.6	127.2	107.0	74.2	57.1	45.3	27.4	20.8	16.7	13.7	11.89	9.43	7.81	4.22
1.60V/cell	174.6	134.4	112.8	77.5	58.9	46.5	28.1	21.4	17.2	14.1	12.12	9.51	7.89	4.24



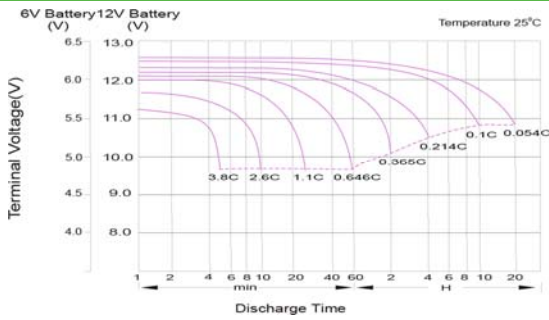
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Dimensions

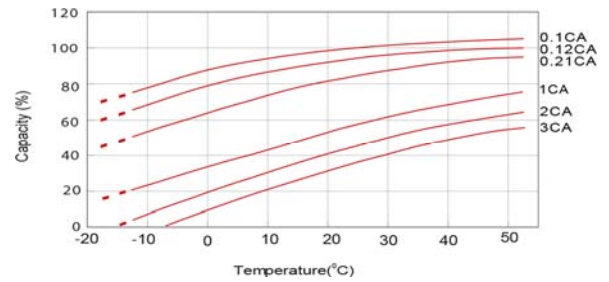
T6 Terminal
Unit: mm [inches]



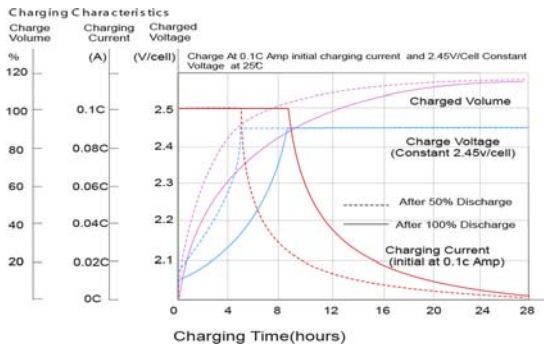
Discharge Characteristics



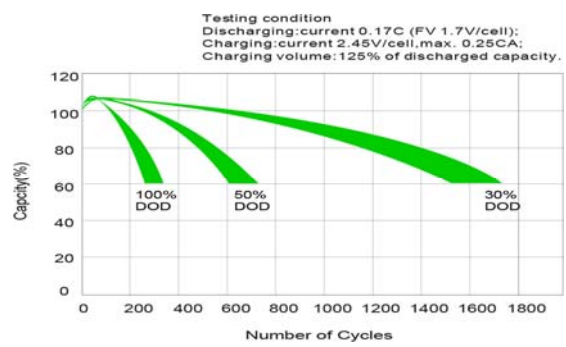
Temperature Effects in Relation to Battery Capacity



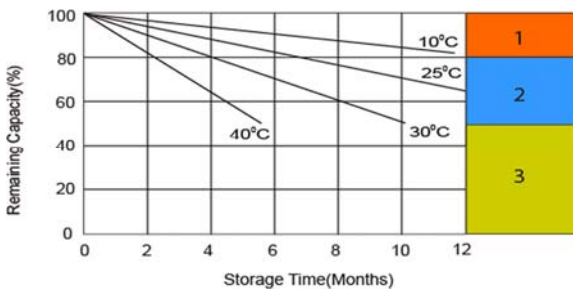
Charging Characteristics (cycle use)



Cycle Life in Relation to Depth of Discharge



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

