

## UP-DC8.0-12



Specification		
Nominal Voltage	12V	
Nominal Capacity (10HR)	8.0AH	
Dimension	Length	151±1mm (5.95 inches)
	Width	65±1mm (2.56 inches)
	Container Height	94.5±1mm (3.72 inches)
	Total Height (with Terminal)	100±1mm (3.94 inches)
	Approx Weight	Approx 2.75 Kg (6.06 lbs)
Terminal	T1 / T2	
Container Material	ABS	
Rated Capacity	8.58 AH/0.43A	(20hr, 1.80V/cell, 25°C/77°F)
	8.00 AH/0.80A	(10hr, 1.80V/cell, 25°C/77°F)
	7.02 AH/1.40A	(5hr, 1.75V/cell, 25°C/77°F)
	6.36 AH/2.12A	(3hr, 1.75V/cell, 25°C/77°F)
	5.17 AH/5.17A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	120A (5s)	
Internal Resistance	Approx 18.0mΩ	
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 2.4A.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	11.7	9.9	8.61	6.20	4.92	3.99	2.48	1.93	1.57	1.27	1.11	0.91	0.76	0.425
1.80V/cell	15.0	11.9	10.2	7.31	5.72	4.47	2.71	2.08	1.67	1.37	1.19	0.96	0.80	0.429
1.75V/cell	16.4	13.0	11.0	7.59	5.94	4.68	2.81	2.12	1.71	1.40	1.22	0.98	0.81	0.433
1.70V/cell	17.9	13.9	11.5	7.90	6.18	4.83	2.92	2.18	1.76	1.44	1.25	0.99	0.82	0.441
1.65V/cell	19.3	14.8	12.2	8.34	6.33	4.99	3.00	2.27	1.82	1.48	1.28	1.01	0.83	0.446
1.60V/cell	21.0	15.8	13.0	8.80	6.60	5.17	3.10	2.34	1.87	1.53	1.30	1.02	0.84	0.449

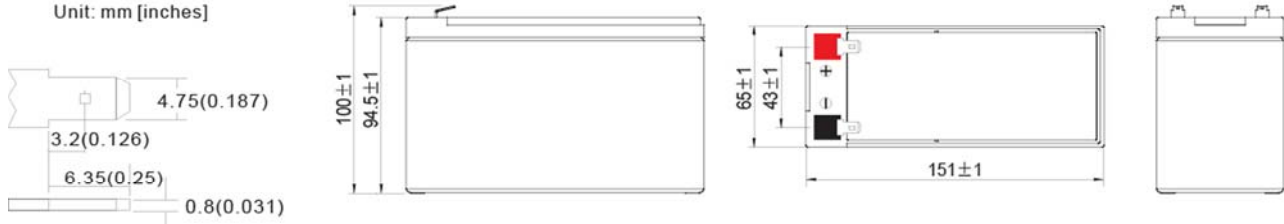
Constant Power Discharge (Watts) at 25°C (77°F)														
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	21.9	18.6	16.4	11.9	9.52	7.75	4.83	3.78	3.07	2.50	2.19	1.79	1.50	0.850
1.80V/cell	27.6	22.1	19.1	13.9	11.0	8.63	5.25	4.05	3.26	2.68	2.34	1.90	1.58	0.857
1.75V/cell	29.9	23.9	20.4	14.3	11.3	9.00	5.42	4.11	3.33	2.74	2.41	1.93	1.60	0.864
1.70V/cell	32.1	25.4	21.3	14.9	11.8	9.26	5.63	4.22	3.41	2.80	2.45	1.96	1.61	0.879
1.65V/cell	34.4	26.8	22.5	15.6	12.0	9.54	5.77	4.38	3.52	2.88	2.50	1.99	1.64	0.889
1.60V/cell	36.7	28.3	23.7	16.3	12.4	9.80	5.92	4.49	3.61	2.96	2.55	2.00	1.66	0.893



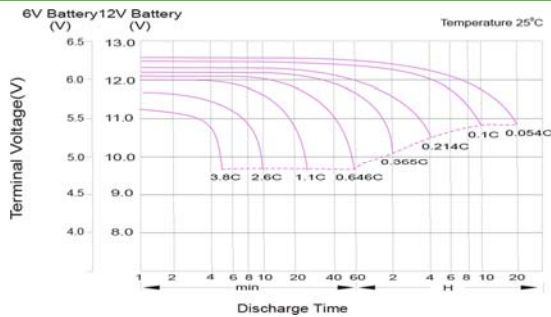
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### Dimensions

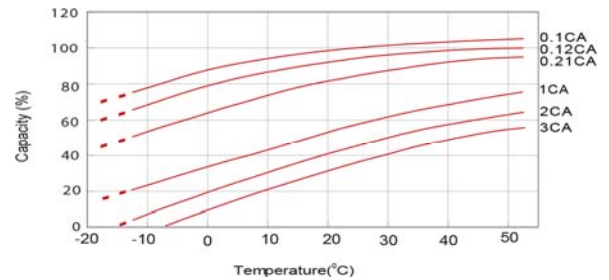
**T1 Terminal**  
Unit: mm [inches]



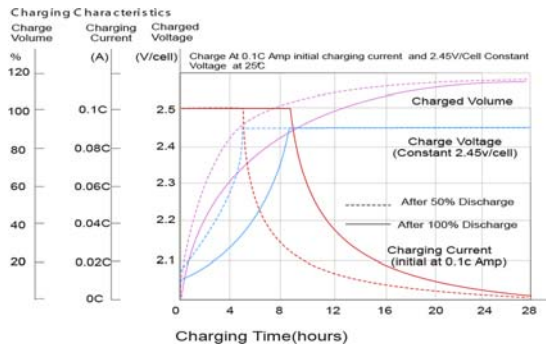
### Discharge Characteristics



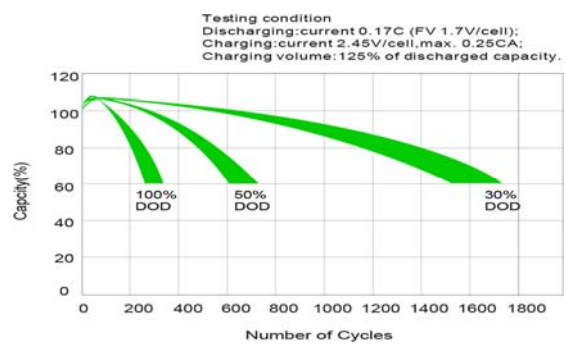
### Temperature Effects in Relation to Battery Capacity



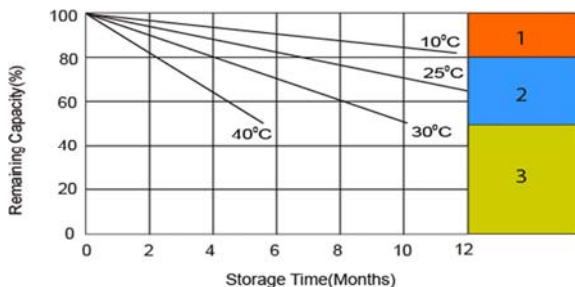
### Charging Characteristics (cycle use)



### 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.

