

**UP1.3-12**



Specification		
Nominal Voltage	12V	
Nominal Capacity (20HR)	1.3AH	
Dimension	Length	97±1mm (3.82 inches)
	Width	43±1mm (1.69 inches)
	Container Height	52±1mm (2.04 inches)
	Total Height (with Terminal)	58±1mm (2.28 inches)
Approx Weight	Approx 0.57 kg (1.26lbs)	
Terminal	T1	
Container Material	ABS	
Rated Capacity	1.30 AH/0.650A	(20hr, 1.80V/cell, 25°C/77°F)
	1.21 AH/0.121A	(10hr, 1.80V/cell, 25°C/77°F)
	1.105 AH/0.221A	(5hr, 1.75V/cell, 25°C/77°F)
	0.996 AH/0.332A	(3hr, 1.75V/cell, 25°C/77°F)
	0.817 AH/0.817A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	18A (5s)	
Internal Resistance	Approx 90mΩ	
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 0.36A. 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.	

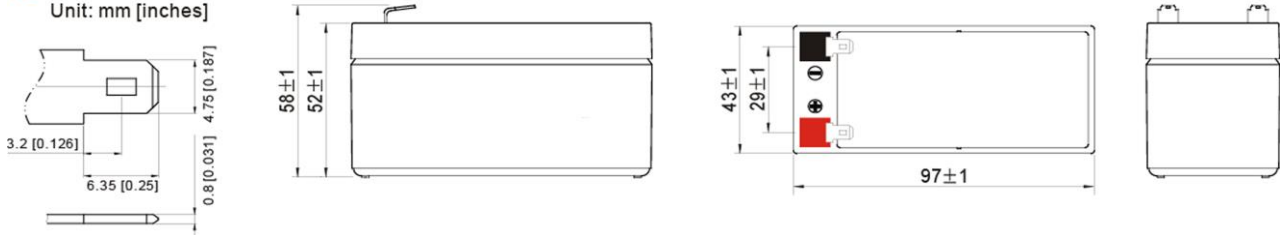
Constant Current Discharge (Amperes) at 25°C (77°F)															
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	2.48	1.9	1.57	1.37	1.05	0.776	0.653	0.387	0.302	0.246	0.2	0.174	0.141	0.117	0,0644
1.80V/cell	3.33	2.43	1.91	1.61	1.25	0.902	0.732	0.423	0.325	0.262	0.216	0.186	0.148	0.121	0,065
1.75V/cell	3.75	2.67	2.08	1.73	1.29	0.936	0.766	0.438	0.332	0.269	0.221	0.192	0.152	0.125	0,0657
1.70V/cell	4.13	2.91	2.22	1.82	1.34	0.974	0.79	0.449	0.341	0.275	0.226	0.196	0.154	0.127	0,0668
1.65V/cell	4.55	3.14	2.36	1.93	1.42	0.998	0.808	0.455	0.355	0.285	0.233	0.2	0.156	0.129	0,0677
1.60V/cell	5.02	3.41	2.52	2.06	1.5	1.04	0.817	0.475	0.366	0.294	0.241	0.205	0.157	0.131	0,0681

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	4.53	3.51	2.94	2.57	2.00	1.49	1.26	0.751	0.589	0.481	0.393	0.342	0.277	0.232	0.1278
1.80V/cell	6.01	4.43	3.49	2.99	2.33	1.72	1.41	0.814	0.631	0.510	0.420	0.365	0.294	0.239	0.1289
1.75V/cell	6.63	4.79	3.78	3.19	2.41	1.77	1.46	0.841	0.640	0.520	0.430	0.375	0.298	0.245	0.1300
1.70V/cell	7.11	5.10	3.98	3.33	2.48	1.83	1.51	0.860	0.657	0.533	0.429	0.381	0.301	0.250	0.1322
1.65V/cell	7.72	5.46	4.19	3.50	2.60	1.86	1.53	0.868	0.681	0.549	0.451	0.389	0.306	0.255	0.1333
1.60V/cell	8.32	5.79	4.42	3.69	2.73	1.93	1.54	0.900	0.699	0.564	0.464	0.395	0.308	0.257	0.1343

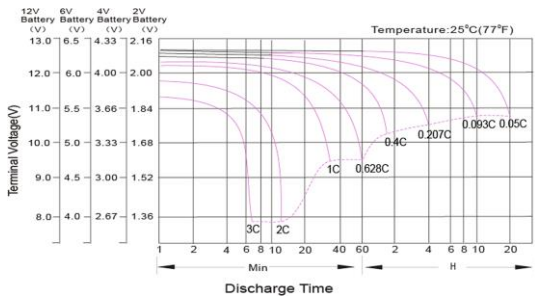
**UP1.3-12**

**Dimensions**

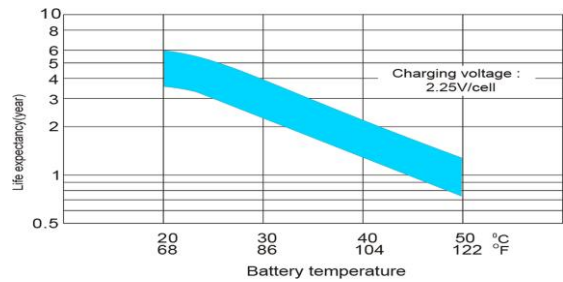
**T1 Terminal**  
Unit: mm [inches]



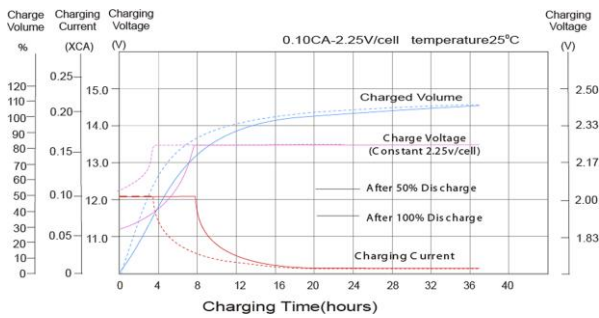
**Discharge Characteristics**



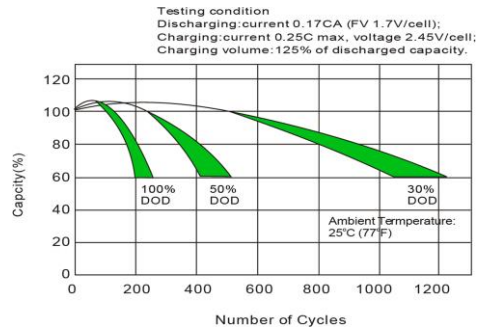
**Effect of Temperature on Long Term Float Life**



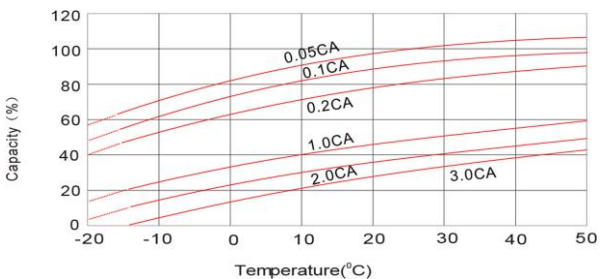
**Float Charging Characteristics**



**Cycle Life in Relation to Depth of Discharge**



**Temperature Effects in Relation to Battery Capacity**



**Self Discharge Characteristics**

