

## UP180-12



Specification		
Nominal Voltage	12V	
Nominal Capacity (10HR)	180.0AH	
Dimension	Length	530±3mm (20.87 inches)
	Width	209±3mm (8.23 inches)
	Container Height	214±3mm (8.42 inches)
	Total Height (with Terminal)	220±3mm (8.66 inches)
	Approx Weight	Approx 52.8 kg (116.4lbs)
Terminal	T11	
Container Material	ABS	
Rated Capacity	187.2 AH/9.36A	(20hr, 1.80V/cell, 25°C/77°F)
	180.0 AH/18.0A	(10hr, 1.80V/cell, 25°C/77°F)
	155 AH/31.0A	(5hr, 1.75V/cell, 25°C/77°F)
	140.4 AH/46.8A	(3hr, 1.75V/cell, 25°C/77°F)
	109.8 AH/109.8A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	1800A (5s)	
Internal Resistance	Approx 3.0mΩ	
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 54.0A.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	242.2	206.0	172.3	136.9	103.6	84.9	54.1	42.7	34.9	28.1	24.5	19.9	17.0	9.27
1.80V/cell	309.5	248.9	203.7	161.6	120.5	95.1	59.0	46.0	37.3	30.2	26.3	21.1	18.0	9.36
1.75V/cell	340.1	271.8	219.1	167.7	125.1	99.5	61.2	46.8	38.1	31.0	27.0	21.5	18.2	9.45
1.70V/cell	370.6	290.2	230.2	174.6	130.1	102.6	63.6	48.2	39.1	31.8	27.6	21.8	18.4	9.63
1.65V/cell	400.0	308.6	244.6	184.2	133.3	106.0	65.4	50.2	40.5	32.7	28.2	22.1	18.7	9.76
1.60V/cell	434.3	330.0	260.6	194.4	139.0	109.8	67.6	51.7	41.7	33.8	28.8	22.3	18.9	9.81

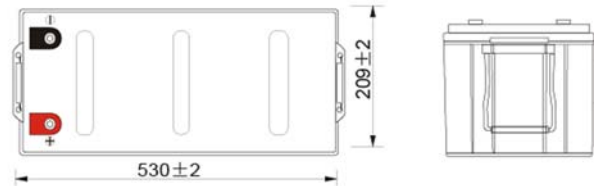
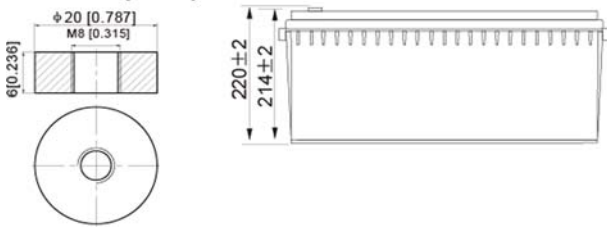
Constant Power Discharge (Watts) at 25°C (77°F)														
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	447.4	384.3	324.7	261.0	199.2	163.7	105.0	83.3	68.2	55.2	48.2	39.3	33.6	18.4
1.80V/cell	564.9	458.1	378.2	303.2	229.9	182.4	113.8	89.1	72.5	59.0	51.5	41.5	35.6	18.5
1.75V/cell	610.8	494.3	403.0	312.2	236.3	189.9	117.6	90.4	73.8	60.3	52.7	42.1	35.9	18.7
1.70V/cell	650.7	520.4	420.3	323.2	244.8	195.3	122.0	92.8	75.7	61.7	53.7	42.7	36.2	19.0
1.65V/cell	695.8	549.0	443.2	338.1	248.7	200.4	124.7	96.3	78.0	63.2	54.7	43.3	36.9	19.2
1.60V/cell	738.1	577.5	467.0	354.5	257.8	206.4	128.2	98.8	80.2	65.1	55.8	43.6	37.2	19.3



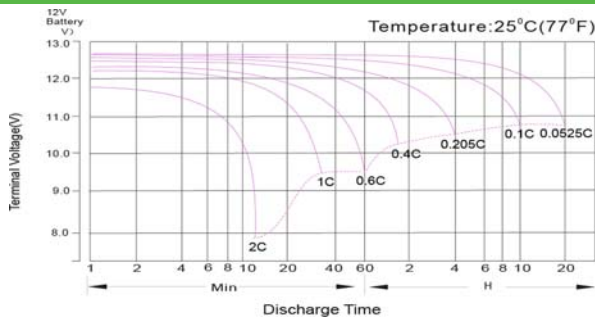
**UP180-12**

**Dimensions**

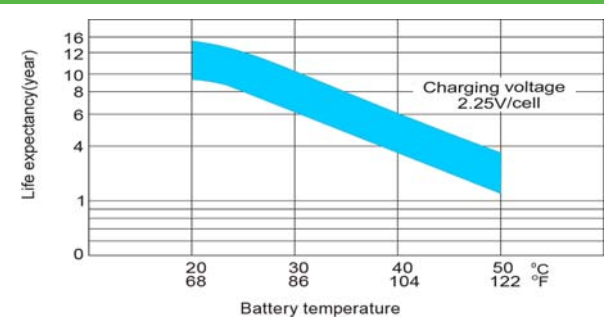
**T1 1 Terminal**  
Unit: mm [inches]



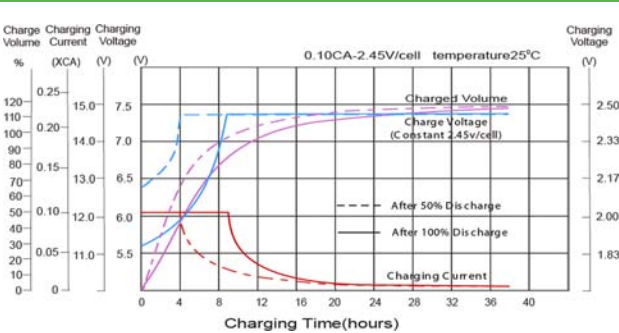
**Discharge Characteristics**



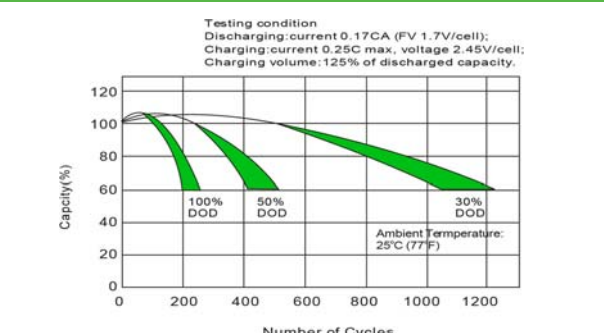
**Effect of Temperature on Long Term Float Life**



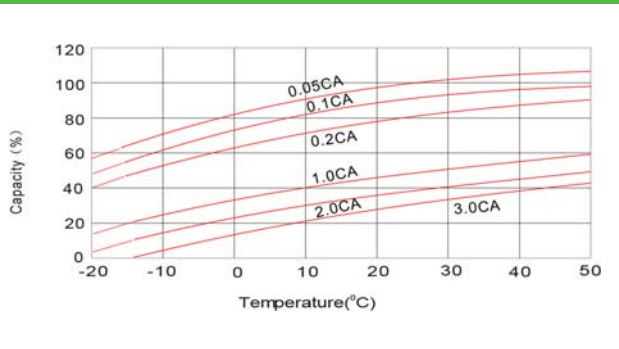
**Charging Characteristics (cycle use)**



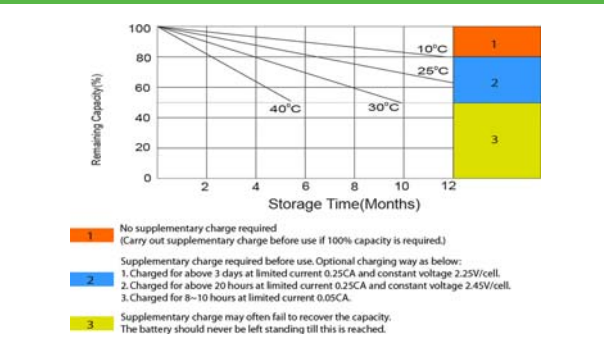
**Cycle Life in Relation to Depth of Discharge**



**Temperature Effects in Relation to Battery Capacity**



**Self Discharge Characteristics**



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