

**UP50-12**



Specification		
Nominal Voltage	12V	
Nominal Capacity (10HR)	50.0AH	
Dimension	Length	257±3mm (10.11 inches)
	Width	132±2mm (5.19 inches)
	Container Height	200±2mm (7.87 inches)
	Total Height (with Terminal)	200±2mm (7.87 inches)
Approx Weight	Approx 16.0 kg (35.3lbs)	
Terminal	T6	
Container Material	ABS	
Rated Capacity	52.0 AH/2.60A	(20hr, 1.80V/cell, 25°C/77°F)
	50.0 AH/5.00A	(10hr, 1.80V/cell, 25°C/77°F)
	43.1 AH/8.62A	(5hr, 1.75V/cell, 25°C/77°F)
	39.0 AH/13.0A	(3hr, 1.75V/cell, 25°C/77°F)
	30.5 AH/30.5A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	600A (5s)	
Internal Resistance	Approx 8mΩ	
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 15.0A.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.	

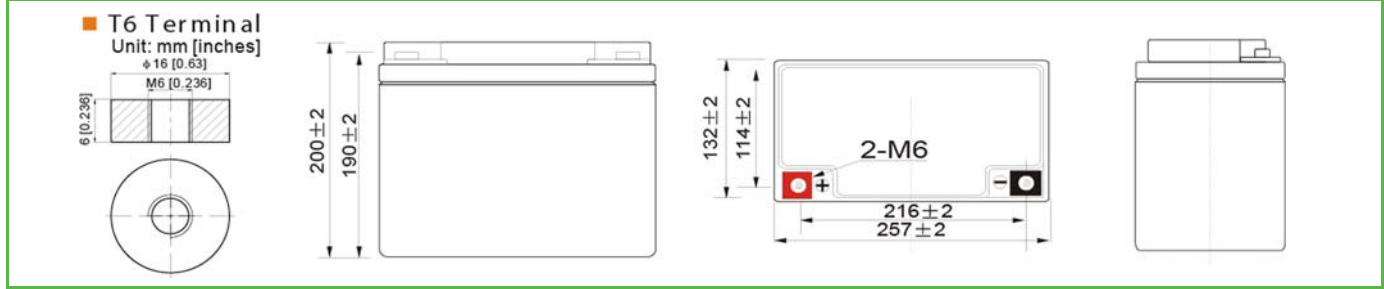
Constant Current Discharge (Amperes) at 25°C (77°F)															
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	85.6	67.3	57.2	47.9	38.0	28.8	23.6	15.0	11.9	9.70	7.82	6.81	5.53	4.72	2.58
1.80V/cell	114.9	86.0	69.1	56.6	44.9	33.5	26.4	16.4	12.8	10.4	8.40	7.30	5.86	5.00	2.60
1.75V/cell	129.5	94.5	75.5	60.9	46.6	34.7	27.6	17.0	13.0	10.6	8.60	7.50	5.96	5.05	2.63
1.70V/cell	142.6	103.0	80.6	64.0	48.5	36.1	28.5	17.7	13.4	10.9	8.83	7.66	6.05	5.10	2.68
1.65V/cell	157.3	111.1	85.7	67.9	51.2	37.0	29.5	18.2	13.9	11.2	9.08	7.83	6.14	5.21	2.71
1.60V/cell	173.5	120.6	91.7	72.4	54.0	38.6	30.5	18.8	14.4	11.6	9.38	8.00	6.20	5.26	2.73

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	156.5	124.3	106.8	90.2	72.5	55.3	45.5	29.2	23.1	19.0	15.3	13.4	10.9	9.34	5.10
1.80V/cell	207.8	156.9	127.3	105.1	84.2	63.9	50.7	31.6	24.8	20.1	16.4	14.3	11.5	9.88	5.14
1.75V/cell	229.3	169.7	137.3	111.9	86.7	65.6	52.8	32.7	25.1	20.5	16.7	14.6	11.7	9.97	5.19
1.70V/cell	245.5	180.7	144.5	116.8	89.8	68.0	54.2	33.9	25.8	21.0	17.1	14.9	11.9	10.1	5.28
1.65V/cell	266.9	193.3	152.5	123.1	93.9	69.1	55.7	34.6	26.7	21.7	17.6	15.2	12.0	10.2	5.34
1.60V/cell	287.5	205.0	160.4	129.7	98.5	71.6	57.3	35.6	27.4	22.3	18.1	15.5	12.1	10.3	5.37

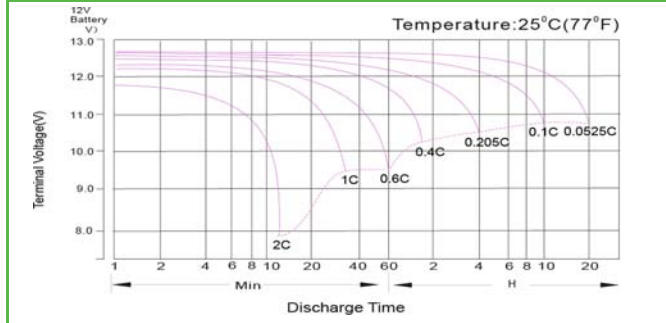


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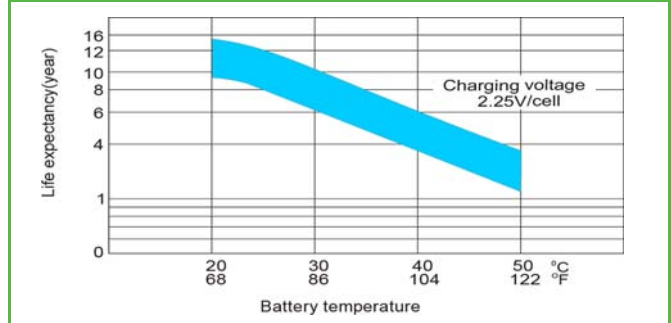
**Dimensions**



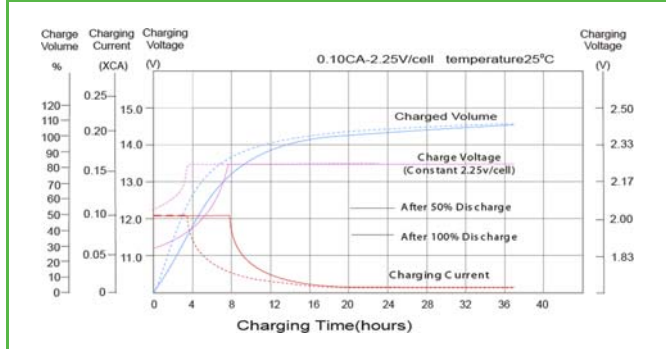
**Discharge Characteristics**



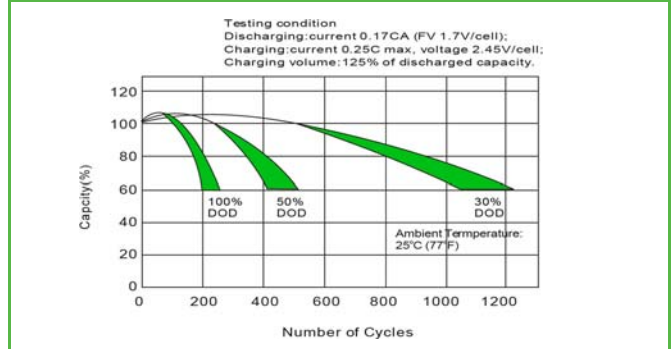
**Effect of Temperature on Long Term Float Life**



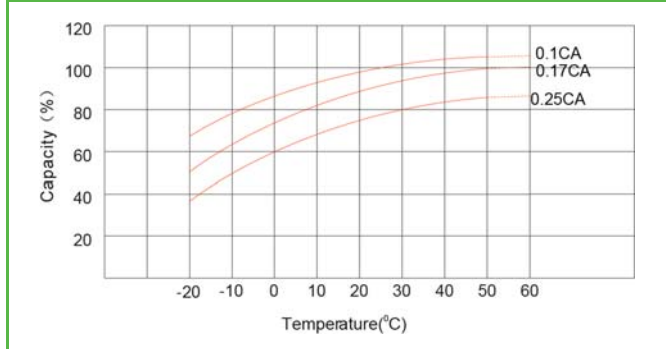
**Float Charging Characteristics**



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



**Temperature Effects in Relation to Battery Capacity**



**Self Discharge Characteristics**

