

UP-PL 100-12

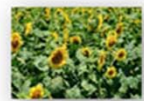
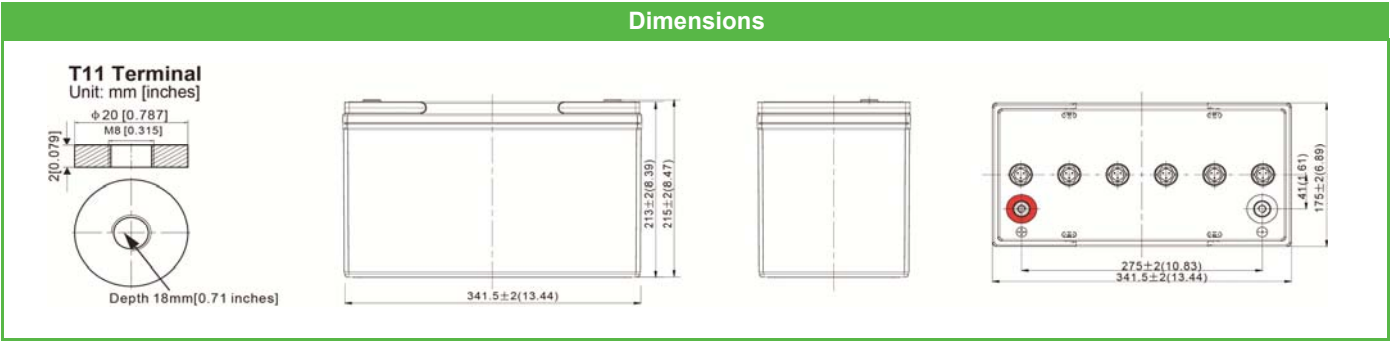


Specification	
Nominal Voltage	12V
Nominal Capacity (10HR)	100.0AH
Dimension	Length 341.5±3mm (13.44 inches)
	Width 175±2mm (6.89 inches)
	Container Height 213±2mm (8.39 inches)
	Total Height (with Terminal) 215±2mm (8.46 inches)
Approx Weight	Approx 29.8Kg (65.7 lbs)
Terminal	T11
Container Material	ABS
Rated Capacity	100.0AH/10.0A (10hr, 1.80V/cell, 25°C/77°F)
	96.0AH/12.0A (8hr, 1.75V/cell, 25°C/77°F)
Max. Discharge Current	1250A (5s)
Internal Resistance	Approx 3.5mΩ
Operating Temperature Range	Discharge: -40~65°C (-40~149°F)
	Change : 0~40°C (32~104°F)
	Storage : -20~40°C (-4~104°F)
Nominal Operating Temperature Range	25±3°C (77±5°F)
Capacity affected by Temperature	40°C (104°F) 103%
	25°C (77°F) 100%
	0°C (32°F) 86%
Self Discharge	Batteries can be stored up to 24 months at 25°C (77°F) and then a freshening charge is required.



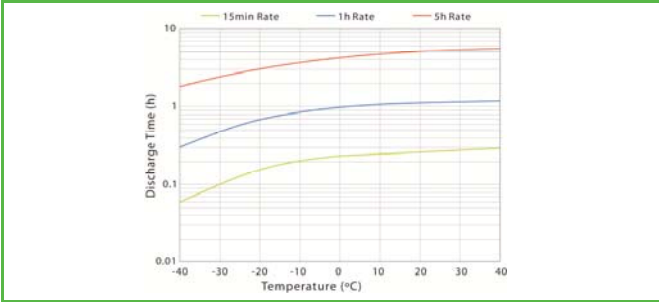
Constant Current Discharge (Amperes) at 25°C (77°F)													
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	194.1	160.4	137.7	106.8	79.3	61.7	34.3	24.5	19.7	16.6	11.5	9.80	5.19
1.80V/cell	216.6	176.2	147.6	111.9	82.2	64.0	35.4	25.4	20.3	17.0	11.8	10.0	5.30
1.75V/cell	229.7	184.3	153.9	115.5	84.5	65.7	36.2	25.9	20.8	17.4	12.0	10.1	5.38
1.70V/cell	241.9	192.0	158.6	118.9	86.3	67.0	36.9	26.4	21.1	17.7	12.1	10.3	5.42
1.67V/cell	262.2	204.1	166.2	122.0	87.6	68.0	37.5	26.9	21.4	18.0	12.3	10.4	5.46
1.60V/cell	276.5	212.8	172.4	125.4	89.3	69.2	38.3	27.3	21.8	18.3	12.5	10.5	5.51

Constant Power Discharge (Watts/cell) at 25°C (77°F)													
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	368.3	306.8	265.0	207.9	156.7	122.3	68.5	49.1	39.6	33.5	23.4	19.9	10.6
1.80V/cell	404.4	332.6	281.2	216.4	161.6	126.1	70.3	50.7	40.7	34.2	23.8	20.3	10.8
1.75V/cell	424.5	344.6	290.8	221.6	164.8	128.8	71.6	51.5	41.5	34.9	24.2	20.5	10.9
1.70V/cell	440.2	354.7	296.8	226.2	167.3	130.6	72.6	52.3	42.0	35.4	24.4	20.7	11.0
1.67V/cell	472.5	373.2	308.4	231.1	169.2	132.1	73.6	53.0	42.5	35.9	24.7	20.9	11.1
1.60V/cell	484.9	381.0	314.7	234.6	170.6	133.2	74.4	53.5	42.9	36.2	24.9	21.0	11.2

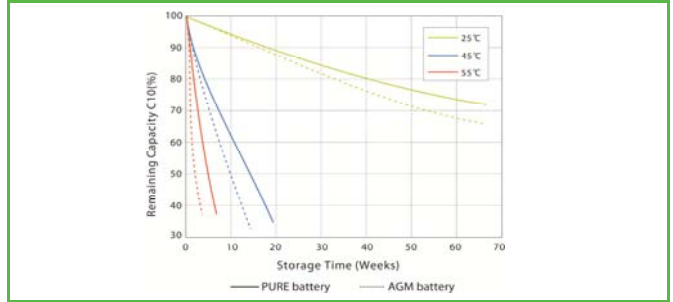


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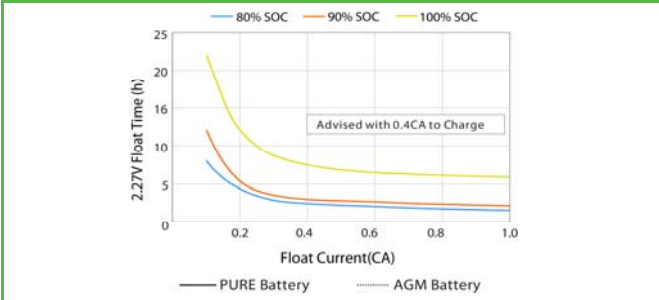
Effect of Temperature on Discharge Time



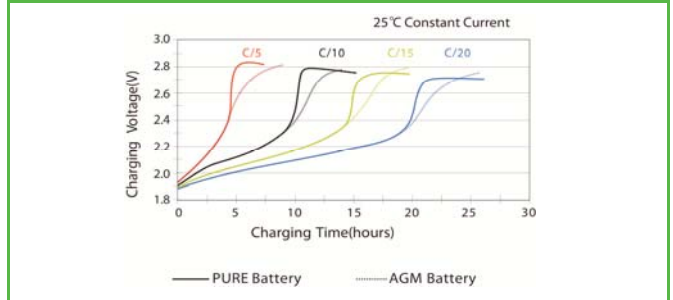
Self Discharge Characteristics



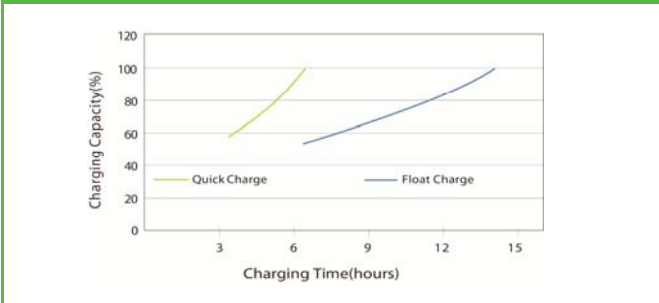
Float Current vs Float Time



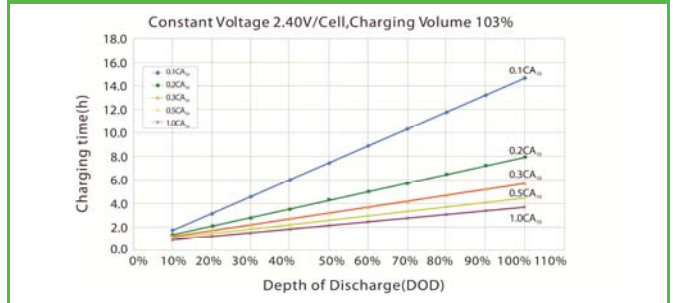
Voltage Profiles @25°C Constant Current Charging



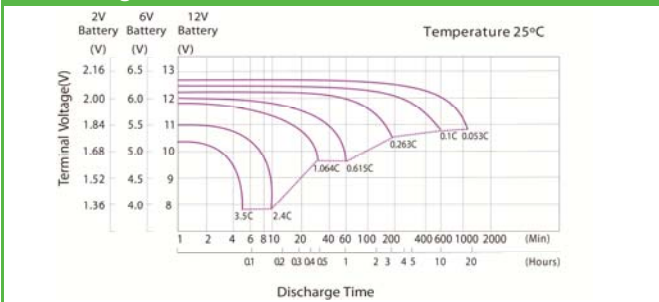
Quick Charge / Float Charge



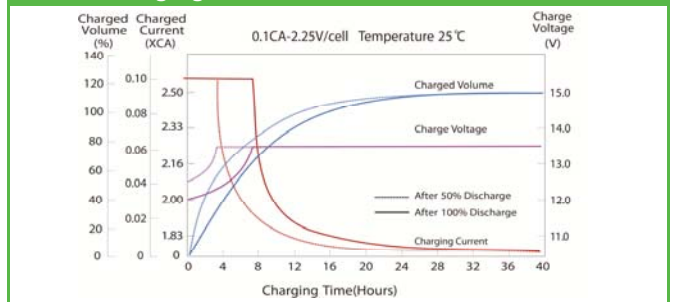
Charge Time vs The Depth of Discharge



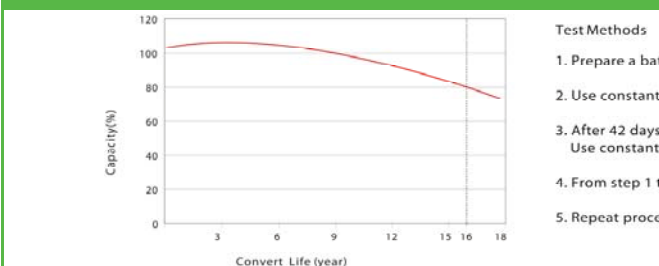
Discharge Characteristics



Float Charging Characteristics



Float Life



Test Methods

1. Prepare a battery which past 1h rate capacity testing in 55 ± 2°C ambient testing temperature for test.
2. Use constant voltage 2.25V/cell to charge for 42 days.
3. After 42 days, take the battery out and put in 25 ± 2°C ambient temperature for 1h rate discharging test. Use constant voltage 2.35V/cell to charge battery for 24 hours.
4. From step 1 to 3 is a testing cycle which can be converted into 1 year service life.
5. Repeat procedure 1, 2, 3 till the capacity less than 80% of 1hour rate capacity.

