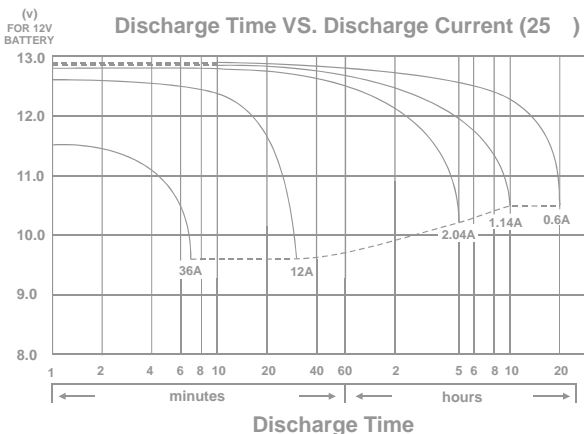
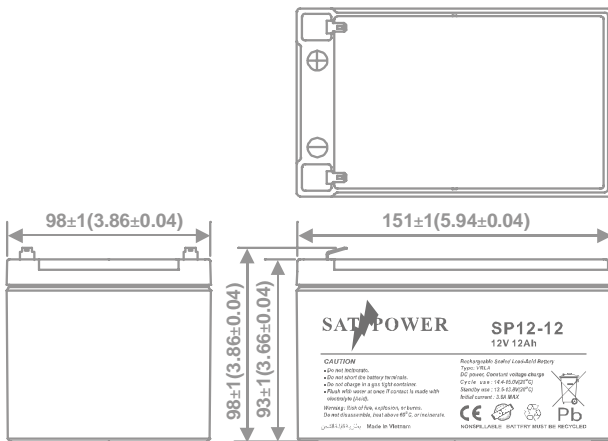
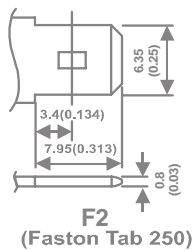




## Dimensions mm(inch)



## SP12-12

### Specifications

Nominal Voltage(V) 12V

#### Nominal Capacity

20 hour rate	(0.6A	to	10.50V)	12Ah
10 hour rate	(1.14A	to	10.50V)	11.4Ah
5 hour rate	(2.04A	to	10.20V)	10.2Ah
1 C	(12A	to	9.60V)	6.4Ah
3 C	(36A	to	9.60V)	4.2Ah

Weight Approx. 3.6kg(7.92Lbs.)

Internal Resistance (at 1KHz) Approx. 13 mΩ

Maximum Discharge Current for 5 seconds: 180A

#### Charging Methods at 25 °C (77 °F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient -5.0mv/°C /cell	
Maximum Charging Current :	3.6A
Standby use:	
Float Charging Voltage	13.5 to 13.8V
Coefficient -3.0mv/°C /cell	

#### Operating Temperature Range

Charge	-15 (5 °C)	to	40 (104 °F)
Discharge	-15 (5 °C)	to	50 (122 °F)
Storage	-15 (5 °C)	to	40 (104 °F)

#### Charge Retention (shelf life) at 20 °C (68 °F)

1 month	92%
3 month	90%
6 month	80%

Case Material ABS  
(UL94 HB)

Terminal F2 (Faston Tab 250)

### Applications

- UPS System
- Alarm Systems & Security equipment
- Telephone & telecom equipment
- Emergency lighting
- Fire & gas detection devices
- Portable measuring instruments
- Medical equipment
- Portable video cameras & television
- Solar systems
- Power tools

**- PERFORMANCE DATA**

**Discharge Rates in Amperes to Various End Voltages at 25 (77 )**

End Voltage		1.85V	1.8V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	37.2	41.4	44.5	47.7	49.1	50.6	53.4
10	min	25.7	28.1	29.4	30.7	31.2	31.9	32.7
15	min	20.3	21.6	22.4	23.2	23.5	23.8	24.5
30	min	11.4	12.1	12.6	13.0	13.1	13.3	13.5
60	min	8.21	8.40	8.52	8.63	8.68	8.74	8.82
120	min	4.21	4.36	4.47	4.56	4.59	4.63	4.68
180	min	2.87	3.06	3.13	3.19	3.22	3.25	3.29
240	min	2.38	2.43	2.47	2.52	2.55	2.58	2.62
300	min	1.97	2.03	2.08	2.14	2.16	2.19	2.23
600	min	1.16	1.18	1.20	1.22	1.23	1.24	1.25
1200	min	0.592	0.599	0.618	0.627	0.634	0.642	0.656

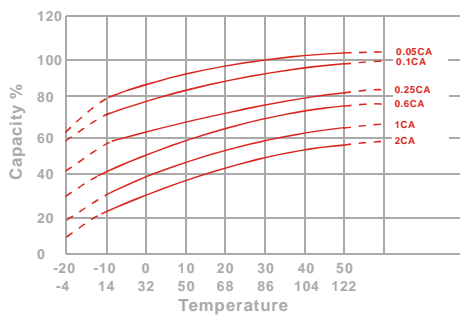
**Discharge Rates in Watts to Various End Voltages at 25 (77 )**

End Voltage		1.85V	1.8V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	405	451	485	520	536	552	582
10	min	288	315	329	344	349	357	366
15	min	232	246	255	264	267	272	279
30	min	133	142	148	152	154	156	158
60	min	94.7	98	100	102	103	104	105
120	min	51.8	53.5	54.3	54.9	55.1	55.4	55.9
180	min	33.9	35.2	36.3	37.2	37.6	38.1	38.5
240	min	28.7	29.3	29.8	30.4	30.7	31.2	31.6
300	min	23.7	24.5	25.1	25.8	26	26.3	26.9
600	min	14.0	14.4	14.6	14.8	14.9	15.0	15.1
1200	min	7.16	7.25	7.48	7.59	7.68	7.77	7.94

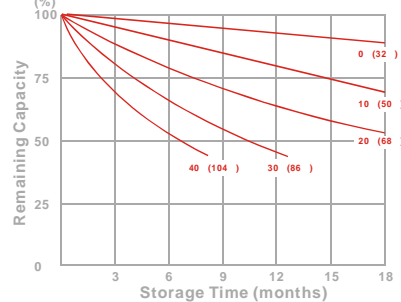
All data on the spec. sheet is an average value:

The tolerance range : X<6min(+15%~-15%), 6min X<10min(+12%~-12%),10min X < 60min(+8%~-8%), X 60min(+5%~-5%)

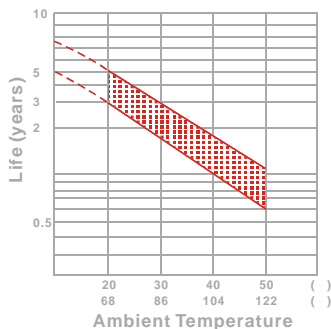
**Effect of Temperature on Capacity 25 (77 )**



**Capacity Retention Characteristic**



**Trickle (or float) Service Life**



**Cycle Service Life**

