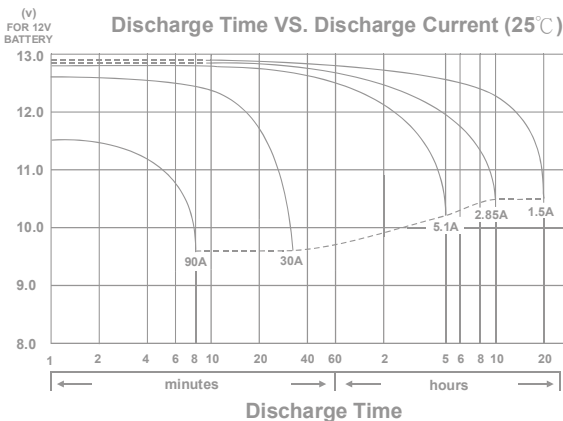
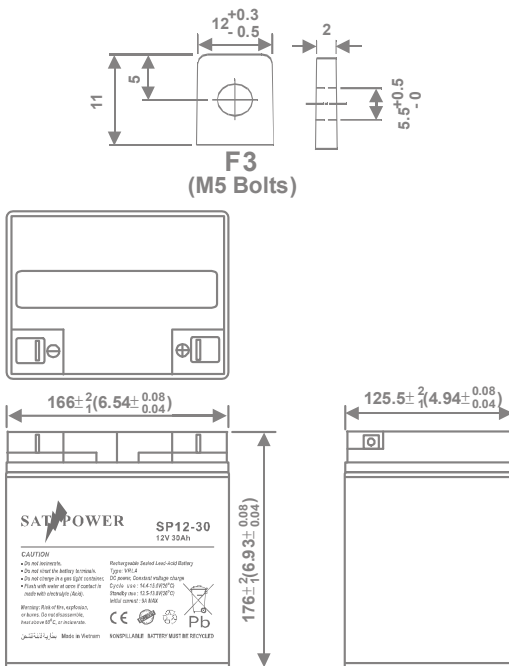




Dimensions

mm(inch)



SP12-30

Specifications

Nominal Voltage(V) 12V

Nominal Capacity

20 hour rate	(1.5A	to	10.50V)	30Ah
10 hour rate	(2.85A	to	10.50V)	28.5Ah
5 hour rate	(5.1A	to	10.20V)	25.5Ah
1 C	(30A	to	9.60V)	17.0Ah
3 C	(90A	to	9.60V)	12.0Ah

Weight Approx. 10.1kg(22.2Lbs.)

Internal Resistance (at 1KHz) Approx. 9 mΩ

Maximum Discharge Current for

5 seconds: 600A

Charging Methods at 25°C(77°F)

Cycle use:

Charging Voltage 14.4 to 15.0V

Coefficient -5.0mv/°C/cell

Maximum Charging Current : 9A

Standby use:

Float Charging Voltage 13.50 to 13.80V

Coefficient -3.0mv/°C/cell

Operating Temperature Range

Charge -15°C(5°F) to 40°C(104°F)

Discharge -15°C(5°F) to 50°C(122°F)

Storage -15°C(5°F) to 40°C(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

F3

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 Watts to Various End Voltages at 25°C(77°F)

Time	End Voltage	1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	843	1064	1188	1257	1280	1302	1331
10	min	646	743	808	855	879	895	919
15	min	566	631	660	687	694	702	715
30	min	350	378	390	399	401	404	408
60	min	206	222	231	237	239	242	245
120	min	122	130	135	139	140	142	144
180	min	92.7	96.3	98.5	100	101	102	103
240	min	76.2	79.5	80.8	81.9	82.4	82.9	83.8
300	min	62.5	65.4	66.6	72.9	67.8	68.3	69.0
600	min	34.8	36.1	37.0	37.8	38.0	38.3	38.7
1200	min	18.8	19.5	20.0	20.3	20.4	20.6	20.8

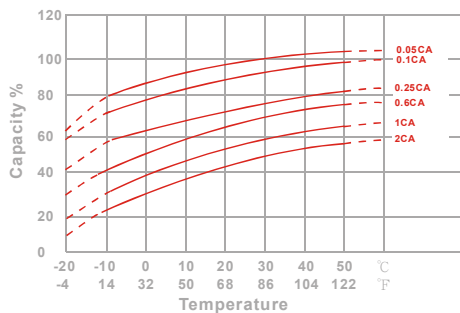
- Discharge Rates in Amperes to Various End Voltages at 25°C(77°F)

Time	End Voltage	1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	75.3	96.7	110	118	121	124	128
10	min	56.4	65.5	71.8	77.0	78.8	81.0	83.4
15	min	48.6	54.4	57.1	59.7	60.6	61.4	62.7
30	min	29.3	31.8	32.9	33.8	34.1	34.5	34.9
60	min	16.9	18.3	19.2	19.8	20.0	20.2	20.4
120	min	10.4	10.9	11.3	11.6	11.7	11.8	11.9
180	min	7.51	7.83	8.04	8.21	8.28	8.35	8.46
240	min	6.12	6.41	6.54	6.66	6.70	6.74	6.81
300	min	5.09	5.34	5.46	5.55	5.59	5.63	5.68
600	min	2.81	2.92	3.00	3.06	3.08	3.11	3.14
1200	min	1.52	1.57	1.61	1.64	1.65	1.67	1.69

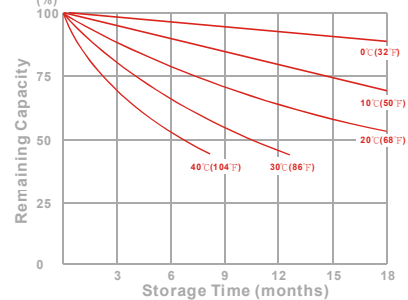
All data on the spec. sheet is an average value:

The tolerance range : $X < 6\text{min}$ (+15%~-15%), $6\text{min} \leq X < 10\text{min}$ (+12%~-12%), $10\text{min} \leq X < 60\text{min}$ (+8%~-8%), $X \geq 60\text{min}$ (+5%~-5%)

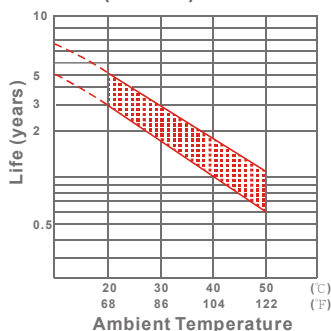
Effect of Temperature on Capacity 25°C(77°F)



Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life

