



SP12-130

Specifications

Nominal Voltage(V) **12V**

Nominal Capacity			
20 hour rate	(6.5A	to	10.50V) 130Ah
10 hour rate	(12.35A	to	10.50V) 123.5Ah
5 hour rate	(22.1A	to	10.20V) 110.5Ah
1 C	(130A	to	9.60V) 82.3Ah
3 C	(390A	to	9.60V) 52Ah

Weight **Approx. 43kg(94.6Lbs.)**

Internal Resistance (at 1KHz) **Approx. 5 mΩ**

Maximum Discharge Current for 5 seconds: **1300A**

Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient	-5.0mv/°C/cell
Maximum Charging Current :	39A
Standby use:	
Float Charging Voltage	13.5 to 13.8V
Coefficient	-3.0mv/°C/cell

Design Life **12 years**

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	98%
3 month	94%
6 month	85%

Case Material **ABS (UL94 HB)**

Terminal **F8**

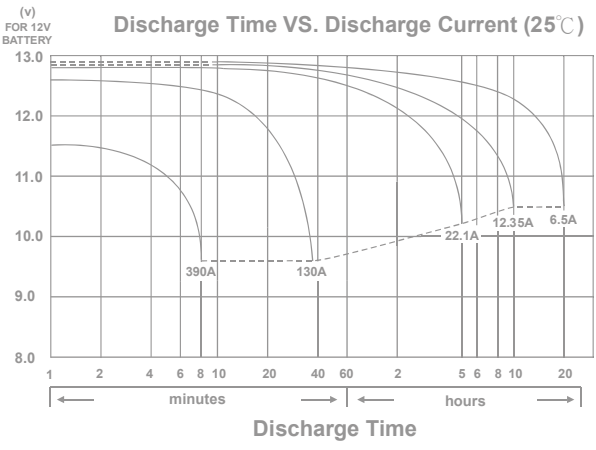
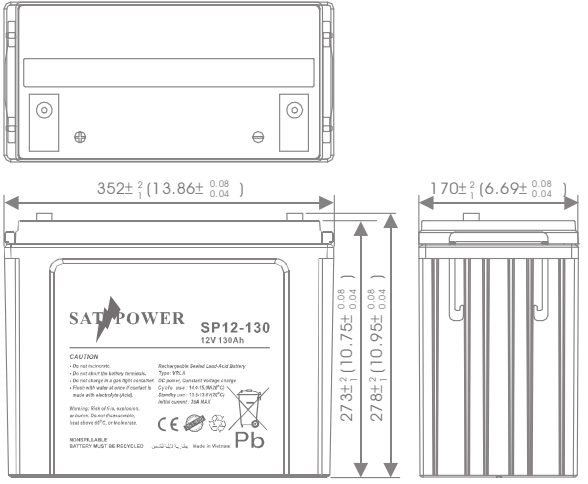
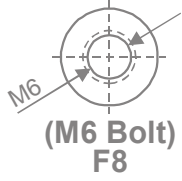
Description of torque value of hard ware for the terminals:

Recommended torque value	M6: 5.39 N-m (55kg-cm)
Maximum allowable torque value	M6: 8.82 N-m (90kg-cm)

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

Dimensions mm(inch)



- PERFORMANCE DATA

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	3281	3641	3910	4338	4439	4544	4738
10	min	2943	3179	3341	3494	3563	3635	3772
15	min	2402	2558	2682	2787	2839	2892	2979
30	min	1468	1540	1567	1629	1650	1674	1715
60	min	855	896	928	951	957	965	977
120	min	492	511	529	544	550	557	567
180	min	384	398	412	423	428	434	442
240	min	296	314	325	334	337	341	347
300	min	259	273	282	289	291	294	298
600	min	152	158	162	166	167	169	171
1200	min	78.1	81.2	83.3	85.2	85.9	86.7	86.8

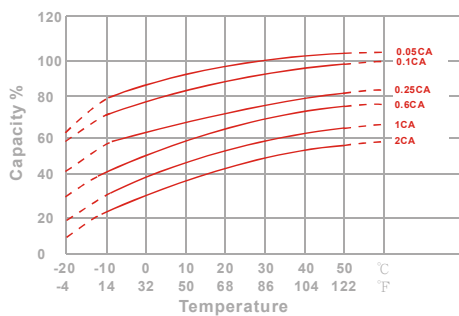
- Discharge Rates in Amperes to Various End Voltages at 25°C(77°F)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	289	362	394	419	429	441	459
10	min	236	265	292	311	320	329	345
15	min	182	211	232	247	252	258	266
30	min	113	128	136	143	146	149	154
60	min	57.8	66.4	73.5	78.9	80.1	81.4	83.6
120	min	37.4	42.4	44.7	46.6	47.3	48.1	49.4
180	min	29.3	32.5	34.4	35.7	36.2	36.9	37.9
240	min	23.7	25.8	27.1	28.0	28.3	28.7	29.2
300	min	21.1	22.4	23.3	23.9	24.1	24.3	24.6
600	min	12.4	13.0	13.3	13.6	13.7	13.9	14.0
1200	min	6.54	6.73	6.87	6.98	7.02	7.07	7.15

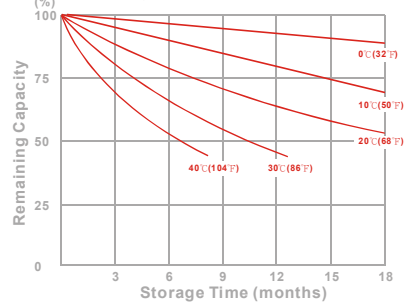
All data on the spec. sheet is an average value:

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%)

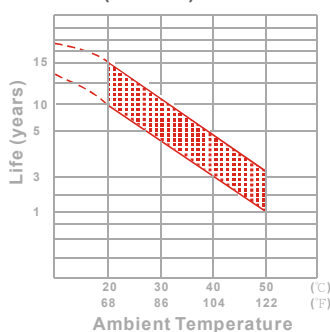
Effect of Temperature on Capacity 25°C(77°F)



Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life

