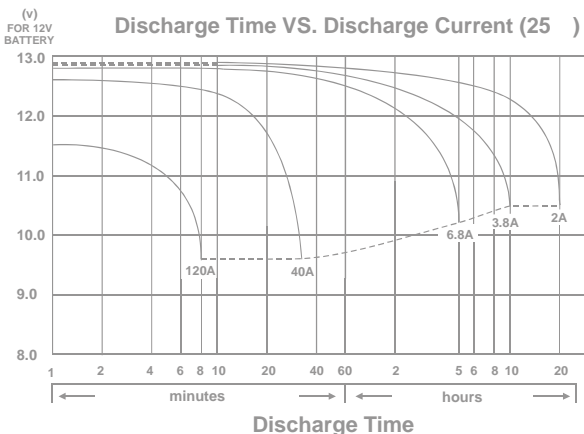
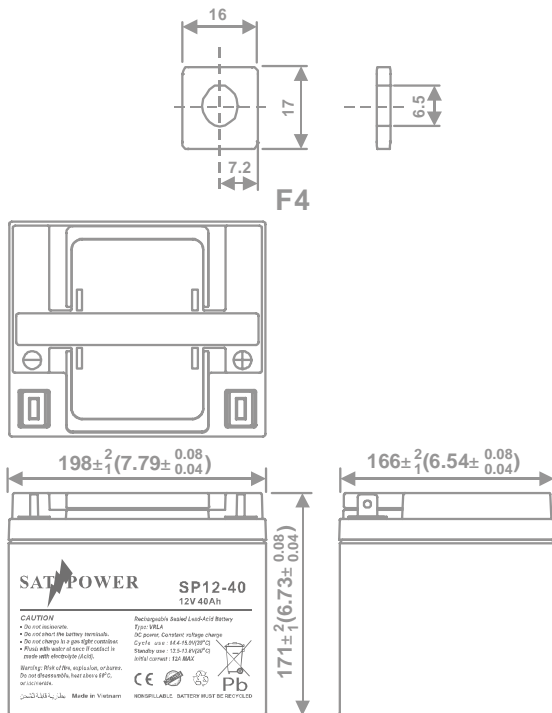


Dimensions mm(inch)



SP12-40

Specifications

Nominal Voltage(V) 12V

Nominal Capacity

20 hour rate	(2A	to	10.50V)	40Ah
10 hour rate	(3.8A	to	10.50V)	38Ah
5 hour rate	(6.8A	to	10.20V)	34Ah
1 C	(40A	to	9.60V)	22.67Ah
3 C	(120A	to	9.60V)	16Ah

Weight Approx. 13.1kg(28.82Lbs.)

Internal Resistance (at 1KHz) Approx. 7 mΩ

Maximum Discharge Current for 5 seconds: 480A

Charging Methods at 25 °C (77 °F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient -5.0mv/°C /cell	
Maximum Charging Current :	12A
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 F4

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)

Time		End Voltage	1.85V	1.8V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min		116	140	157	168	171	174	178
10	min		74.1	89.0	99.2	105	107	109	111
15	min		56.5	66.4	73.3	77.8	79.1	80.2	81.4
30	min		30.7	34.9	38.7	40.0	40.9	42.2	42.9
60	min		22.7	23.4	23.8	24.2	24.4	24.6	24.9
120	min		12.6	13.1	13.5	13.8	13.9	14.1	14.3
180	min		9.27	9.62	9.84	10.0	10.1	10.20	10.4
240	min		7.34	7.63	7.88	8.06	8.09	8.13	8.21
300	min		6.43	6.68	6.84	6.98	7.02	7.05	7.13
600	min		3.52	3.70	3.87	3.98	4.02	4.07	4.12
1200	min		1.87	1.95	2.03	2.07	2.09	2.12	2.14

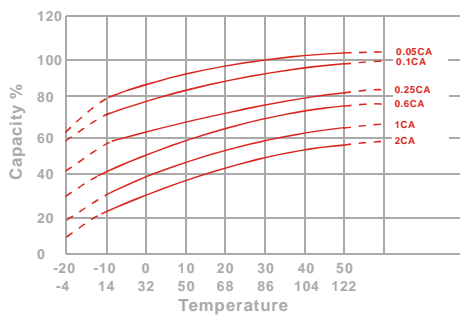
Discharge Rates in Watts to Various End Voltages at 25 (77)

Time		End Voltage	1.85V	1.8V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min		1337	1603	1795	1919	1951	1987	2022
10	min		856	1029	1153	1232	1251	1275	1298
15	min		663	780	861	913	927	942	960
30	min		354	416	459	487	494	502	510
60	min		263	272	279	284	286	288	291
120	min		155	161	164	167	168	170	172
180	min		113	117	120	122	123	124	126
240	min		89.1	91.6	93.4	95.0	95.5	96.1	97.2
300	min		81.4	83.6	85.2	86.6	87.2	87.8	88.7
600	min		41.6	42.9	44.1	45.3	45.8	46.4	47.2
1200	min		21.3	22.5	23.6	24.5	24.9	25.4	26.1

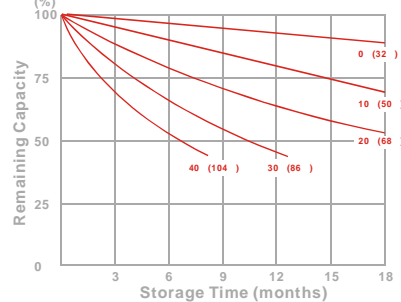
All data on the spec. sheet is an average value:

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

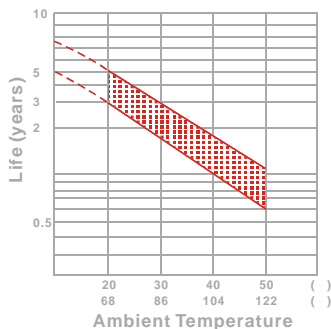
Effect of Temperature on Capacity 25 (77)



Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life

