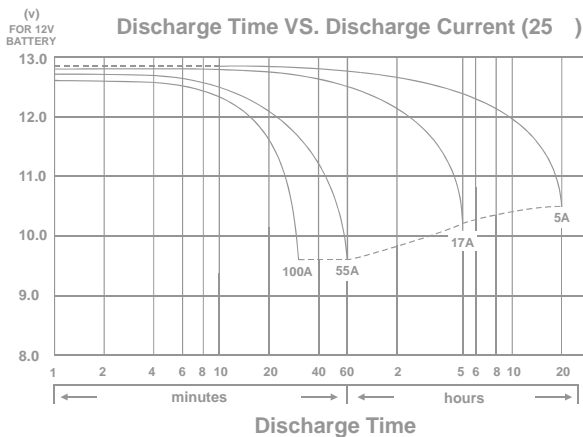
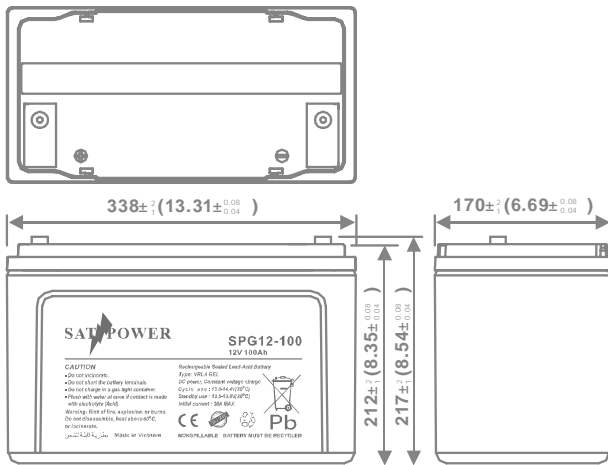
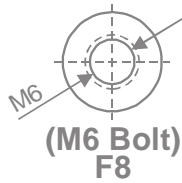


SAT POWER



Dimensions

mm(inch)



SPG12-100

Specifications

Nominal Voltage(V) 12V

Nominal Capacity

| | | | | |
|--------------|-------|----|---------|--------|
| 20 hour rate | (5A | to | 10.50V) | 100Ah |
| 5 hour rate | (17A | to | 10.20V) | 85Ah |
| 1 hour rate | (55A | to | 9.60V) | 55Ah |
| 1 C | (100A | to | 9.60V) | 53.3Ah |

Weight Approx. 34kg(74.8Lbs.)

Internal Resistance (at 1KHz) Approx. 3 mΩ

Maximum Discharge Current for

5 seconds: 1200A

Charging Methods at 25 °C (77 °F)

Cycle use:

Charging Voltage 13.8 to 14.4V

Coefficient -5.0mV/°C /cell

Maximum Charging Current : 30A

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 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

- 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 | | 188 | 247 | 281 | 309 | 318 | 329 | 344 |
| 10 | min | | 141 | 167 | 186 | 202 | 209 | 217 | 230 |
| 15 | min | | 104 | 129 | 146 | 158 | 163 | 168 | 176 |
| 30 | min | | 78.1 | 88.7 | 95.2 | 100 | 101 | 103 | 105 |
| 60 | min | | 40.2 | 47.8 | 53.1 | 56.9 | 57.8 | 59.1 | 60.9 |
| 120 | min | | 22.4 | 26.2 | 29.2 | 32.1 | 32.8 | 33.7 | 34.8 |
| 180 | min | | 19.3 | 21.5 | 23.2 | 24.6 | 25.0 | 25.6 | 26.3 |
| 240 | min | | 15.4 | 17.1 | 18.3 | 19.2 | 19.4 | 19.8 | 20.3 |
| 300 | min | | 14.5 | 15.7 | 16.5 | 17.0 | 17.2 | 17.4 | 17.7 |
| 600 | min | | 9.60 | 9.88 | 10.1 | 10.3 | 10.4 | 10.5 | 10.7 |
| 1200 | min | | 4.83 | 4.99 | 5.15 | 5.26 | 5.31 | 5.37 | 5.44 |

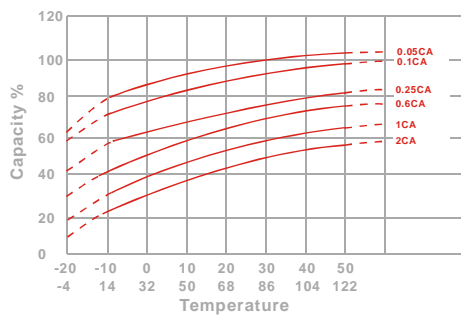
Discharge Rates in Watts to Various End Voltages at 25 (77)

| Time | | End Voltage | 1.85V | 1.8V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|------|-----|-------------|-------|------|-------|-------|-------|-------|-------|
| 5 | min | | 2759 | 3048 | 3247 | 3437 | 3524 | 3616 | 3789 |
| 10 | min | | 1858 | 2032 | 2175 | 2312 | 2371 | 2437 | 2555 |
| 15 | min | | 1464 | 1597 | 1697 | 1795 | 1838 | 1884 | 1966 |
| 30 | min | | 863 | 921 | 969 | 1015 | 1034 | 1058 | 1096 |
| 60 | min | | 645 | 671 | 687 | 703 | 710 | 718 | 728 |
| 120 | min | | 352 | 369 | 383 | 392 | 397 | 404 | 412 |
| 180 | min | | 272 | 286 | 299 | 300 | 305 | 311 | 317 |
| 240 | min | | 197 | 209 | 220 | 232 | 235 | 240 | 246 |
| 300 | min | | 183 | 192 | 200 | 205 | 207 | 210 | 214 |
| 600 | min | | 109 | 116 | 121 | 125 | 127 | 129 | 131 |
| 1200 | min | | 60.0 | 62.1 | 63.7 | 64.9 | 65.4 | 65.9 | 66.7 |

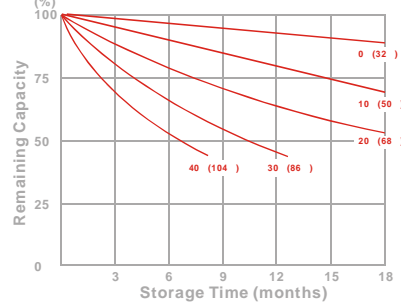
All data on the spec. sheet is an average value:

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

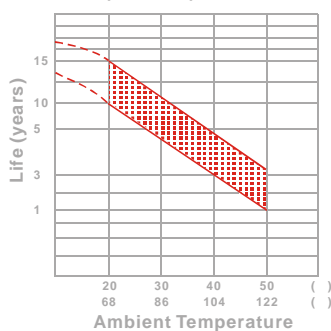
Effect of Temperature on Capacity 25 (77)



Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life

