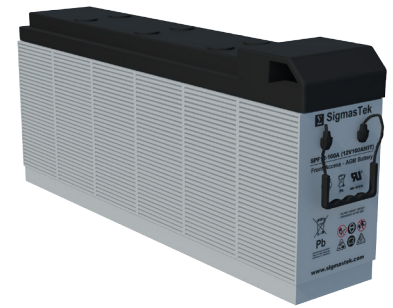


Specifications

| | | |
|----------------------------------|--|-------------------------------|
| Nominal Voltage | 12V | |
| Nominal Capacity (8HR) | 100AH | |
| Dimension | Length | 508mm (20.0 inches) |
| | Width | 110mm (4.33 inches) |
| | Height | 238.5mm (9.39 inches) |
| | Total Height (with Terminal) | 238.5mm (9.39 inches) |
| | Approximate Weight | 35.0 kg (77.2 lbs) |
| Battery Type | Valve Regulated Lead-Acid Battery, AGM Design | |
| Terminal Type | IT | |
| Rated Capacity | 110.0AH | (20hr, 1.80V/cell, 25°C/77°F) |
| | 103.8AH | (10hr, 1.80V/cell, 25°C/77°F) |
| | 100.0AH | (8hr, 1.80V/cell, 25°C/77°F) |
| | 94.5AH | (5hr, 1.75V/cell, 25°C/77°F) |
| | 69.2AH | (1hr, 1.67V/cell, 25°C/77°F) |
| Max. Discharge Current | 1000A | |
| Internal Resistance | 4.3mΩ | |
| Operating Temp. Range | Discharge: | -15°C (5°F)~50°C (122°F) |
| | Charge: | 0°C (32°F)~40°C (104°F) |
| | Storage: | -15°C (5°F)~40°C (104°F) |
| Nominal Operating Temp. Range | 25±3°C (77±5°F) | |
| Container Material | ABS (Option: 94-HB & 94-V0 flame retardant case) | |
| Capacity affected by Temperature | 40°C (104°F) | 103% |
| | 25°C (77°F) | 100% |
| | 0°C (32°F) | 86% |
| Self Discharge | SigmasTek SPF series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is recommended. For higher temperatures the time interval will be shorter. | |



Applications

- Standard 19 & 23 inch power cabinets
- Solar power stations
- Network communication equipment
- UPS and standby power supply
- Power station systems
- Railway and marine systems



Constant Current Discharge (Amperes Per Battery) at 25°C (77°F)

| F.V. (V/cell) \ Discharge Time | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|--------------------------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-------|-------|------|
| 1.60V | 251.8 | 196.0 | 163.0 | 119.9 | 89.1 | 71.0 | 40.8 | 29.3 | 23.4 | 19.3 | 16.7 | 12.98 | 10.80 | 5.68 |
| 1.67V | 239.5 | 188.8 | 156.0 | 117.0 | 86.8 | 69.2 | 40.1 | 28.9 | 23.1 | 19.1 | 16.6 | 12.90 | 10.65 | 5.65 |
| 1.70V | 231.5 | 184.2 | 152.9 | 115.5 | 86.5 | 68.9 | 40.0 | 28.8 | 23.0 | 19.0 | 16.5 | 12.80 | 10.56 | 5.62 |
| 1.75V | 216.4 | 174.9 | 146.9 | 112.2 | 84.5 | 68.0 | 39.4 | 28.6 | 22.9 | 18.9 | 16.3 | 12.70 | 10.49 | 5.58 |
| 1.80V | 197.2 | 161.6 | 137.7 | 106.8 | 81.4 | 65.7 | 38.7 | 28.1 | 22.3 | 18.5 | 16.1 | 12.50 | 10.38 | 5.50 |
| 1.85V | 173.9 | 145.0 | 124.4 | 97.60 | 75.7 | 61.5 | 36.7 | 26.4 | 21.2 | 17.6 | 15.3 | 11.90 | 9.920 | 5.26 |

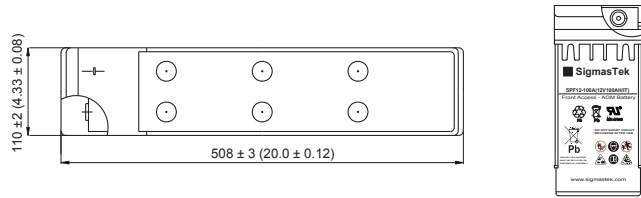
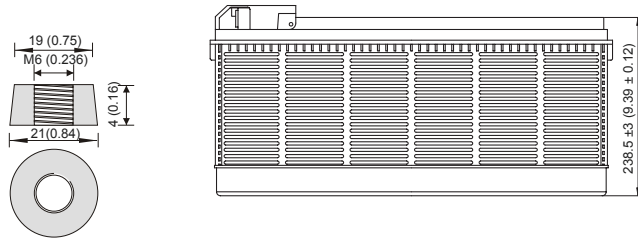
Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

| F.V. (V/cell) \ Discharge Time | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|--------------------------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|-------|
| 1.60V | 433.0 | 346.9 | 295.4 | 221.0 | 167.0 | 134.9 | 78.2 | 56.5 | 45.4 | 37.6 | 32.7 | 25.6 | 21.4 | 11.30 |
| 1.67V | 423.6 | 340.8 | 286.8 | 218.4 | 164.5 | 132.8 | 77.6 | 56.1 | 45.1 | 37.3 | 32.6 | 25.5 | 21.2 | 11.25 |
| 1.70V | 411.0 | 333.9 | 282.2 | 216.1 | 164.5 | 132.5 | 77.5 | 56.2 | 45.0 | 37.2 | 32.5 | 25.4 | 21.0 | 11.21 |
| 1.75V | 393.0 | 321.4 | 273.3 | 211.1 | 161.4 | 131.2 | 76.6 | 55.7 | 44.8 | 37.1 | 32.1 | 25.2 | 20.9 | 11.14 |
| 1.80V | 363.9 | 300.7 | 258.5 | 202.5 | 156.9 | 127.3 | 75.4 | 55.0 | 43.8 | 36.4 | 31.7 | 24.9 | 20.7 | 10.98 |
| 1.85V | 324.8 | 273.4 | 237.0 | 187.9 | 147.0 | 119.9 | 72.0 | 52.0 | 41.9 | 34.8 | 30.3 | 23.7 | 19.8 | 10.52 |

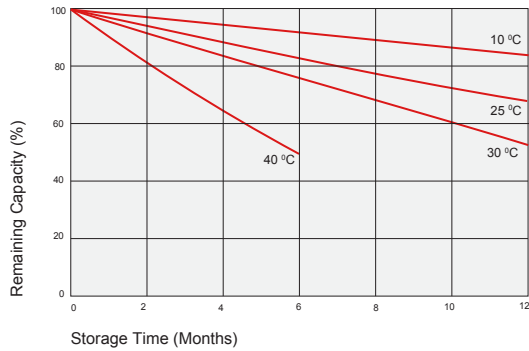
Dimensions

IT Terminal

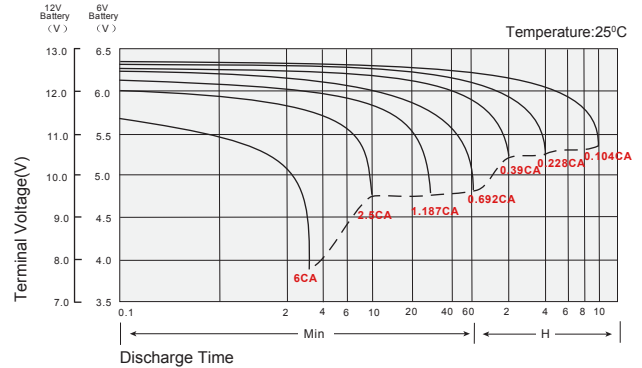
Unit: mm (inches)



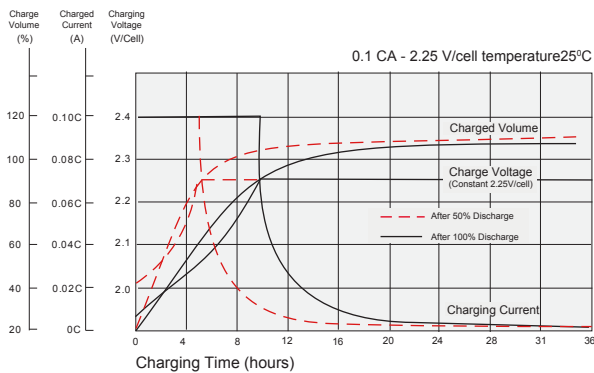
Self Discharge Characteristics



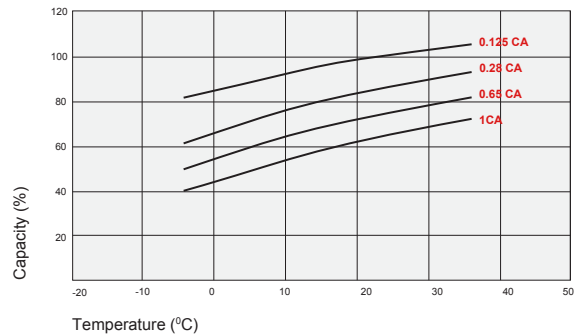
Discharge Characteristics



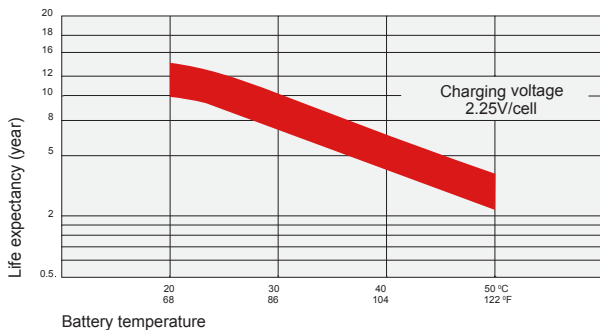
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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