

Solar battery (Gel)

Model: WT-SG100-12 (12V100AH)

Application

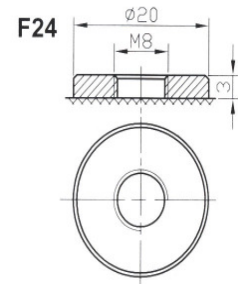
- Solar system
- Wind system
- Communication equipment
- Security and control equipment
- Mobile electrical devices



General features

- Excellent recovery from deep discharge
- Extremely low self-discharge rate
- Longer life in deep cycle applications
- High power density and quality

Terminal



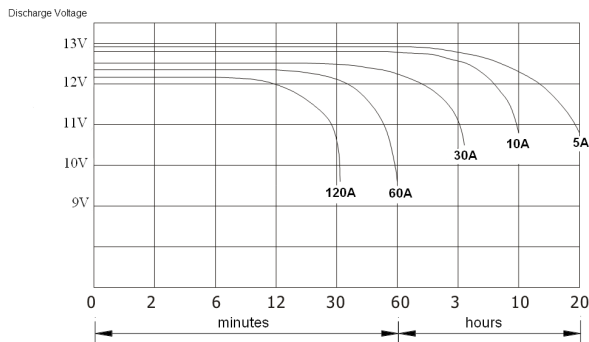
| | | | | |
|---|----------------------------------|-------------|------------------|---------------|
| Nominal voltage | 12V | | | |
| Nominal capacity | 100AH | | | |
| Dimensions | length | width | container height | total height |
| | 330mm | 170mm | 217mm | 235mm |
| Rated Capacity (25°C) | 10HR (10A) | 20HR (515A) | 120HR (0,88A) | 240HR (0,45A) |
| | 100AH | 103AH | 106AH | 110AH |
| Weight | 31Kg | | | |
| Internal Resistance | Fully charged at 25°C: 0,0045Ohm | | | |
| Capacity affected by Temperature (10HR) | 40°C | 25°C | 0°C | |
| | 103% | 100% | 86% | |

| | |
|---|--|
| Cycle application | <ol style="list-style-type: none"> 1. Limit initial current less than 20A. 2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77F). 3. Hold at 14.1V to 14.4V until current drop to under 0.6A for at least 3 hours. 4. Temperature compensation coefficient of charging voltage is -30mV/°C. |
| Standby service | <ol style="list-style-type: none"> 1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 20A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status. 2. Temperature compensation coefficient of charging voltage is -18mV/°C |
| <p>NOTE : The battery should be charged within 9 months of storage ,Otherwise , permanent loss of capacity might occur as a result of sulfation</p> | |

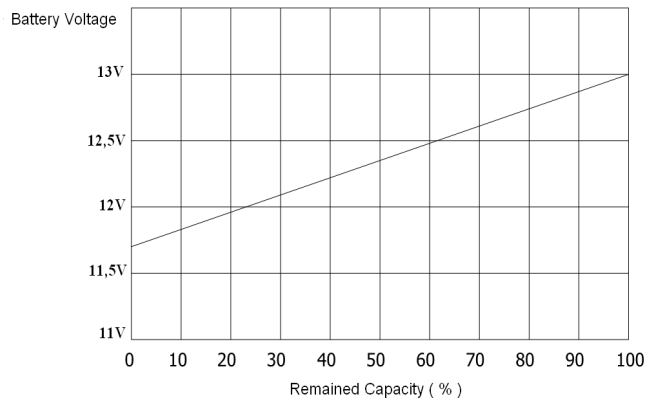
Constant Discharge Data Sheet (Amperes at 25°C)

| Voltage / Time | 1h | 2h | 4h | 8h | 10h | 20h | 48h | 96h | 120h | 240h |
|----------------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 10,2V | 64.75 | 35.74 | 21.98 | 12.41 | 10.10 | 5.44 | 2.15 | 1.08 | 0.85 | 0.43 |
| 10,5V | 62.97 | 33.76 | 20.89 | 12.00 | 10.05 | 5.38 | 2.09 | 1.05 | 0.83 | 0.41 |
| 10,8V | 61.29 | 31.68 | 19.90 | 11.59 | 10.00 | 5.32 | 2.03 | 1.02 | 0.81 | 0.40 |
| 11,1V | 59.50 | 30.10 | 18.91 | 11.19 | 9.95 | 5.26 | 1.96 | 0.99 | 0.79 | 0.39 |
| 11,4V | 57.82 | 27.62 | 17.82 | 10.77 | 9.90 | 5.19 | 1.90 | 0.96 | 0.77 | 0.38 |

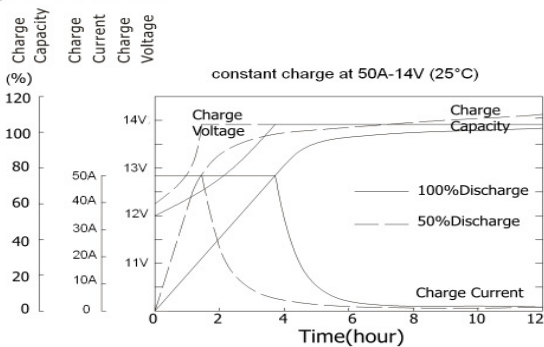
Discharge Characteristic 25°C



Relationship of OCV and state of charge



Charge Characteristic



Life expectancy cycle use

- 100% depth of discharge: 350 cycles
- 80% depth of discharge: 600 cycles
- 50% depth of discharge: 900 cycles
- 30% depth of discharge: 1500 cycles
- 20% depth of discharge: 1700 cycles



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