

## 12V-200AH Solar Series VRLA Battery

### Solar Series

SunSurfs Solar Series Valve-regulated Lead Acid batteries use particular corrosion-resistant alloy and hybrid gel technology design to ensure an excellent performance in various environments, especially high and low temp. SunSurfs Solar series batteries are optimal for storage and conversion of photovoltaic energy and wind energy.

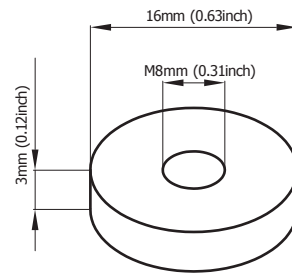
### Application

- Photovoltaic system
- Alternative Energy System
- Electric Utility
- Outdoor control Equipment
- Railroad Utility



### General Features

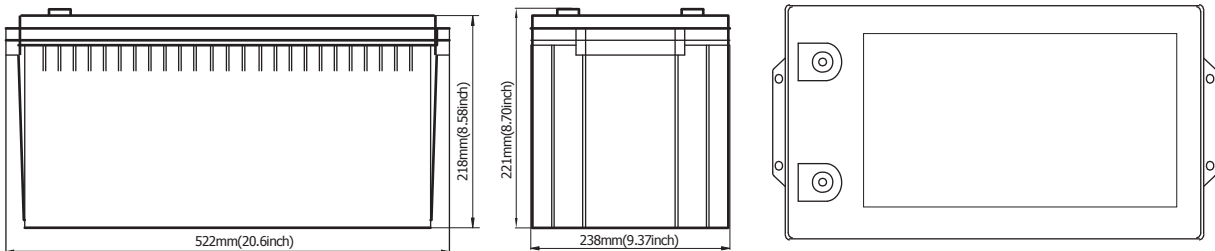
- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers(UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof.
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.
- Flexibility design for multiple install positions.



### Construction

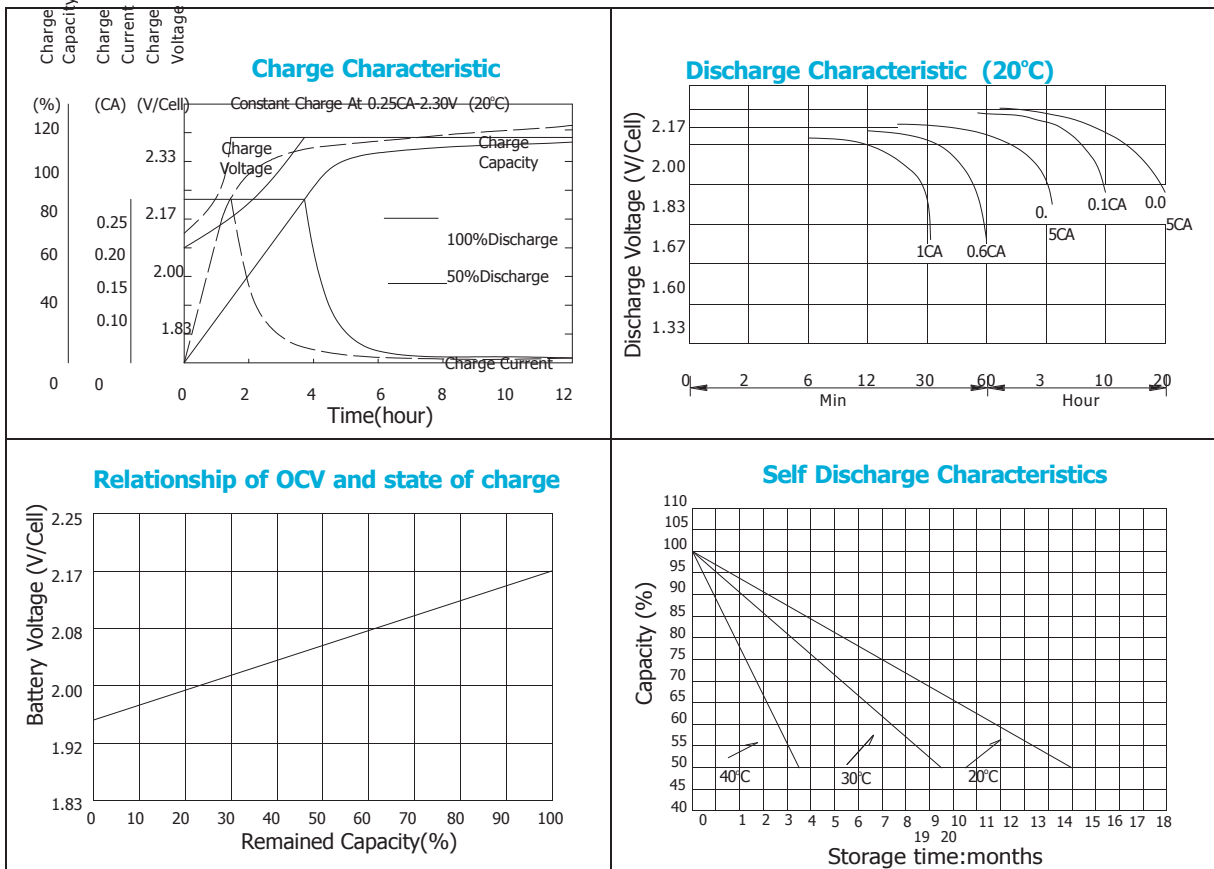
- |           |                   |               |                  |
|-----------|-------------------|---------------|------------------|
| Component | .....Raw material | Sealant       | .....Epoxy Resin |
| Positive  | .....Lead dioxide | Safety valve. | ..... EPDR       |
| Negative  | .....Lead         | Terminal      | .....Copper      |
| Container | .....ABS          | Separator     | .....AGM         |
| Cover     | .....ABS          | Electrolyte   | .....Hybrid Gel  |

### Terminal Dimensions



|                                  |   |                 |                       |                 |
|----------------------------------|---|-----------------|-----------------------|-----------------|
| Battery Model                    | Solar 12-200                                |                 |                       |                 |
| Designed Floating Life           | 10 Years                                    |                 |                       |                 |
| Capacity(20°C)                   | 20HR(10.5A,1.80V)                           | 10HR(20A,1.80V) | 5HR(34A,1.75V)        | 1HR(126A,1.60V) |
|                                  | 210AH                                       | 200AH           | 170AH                 | 126AH           |
| Dimensions                       | Length                                      | Width           | Height                | Total Height    |
|                                  | 522mm(20.6inch)                             | 238mm(9.37inch) | 218mm(8.58inch)       | 221mm(8.70inch) |
| Approx. Weight                   | 61Kg (135 lbs)                              |                 |                       |                 |
| Internal Resistance              | Full charged at 20°C: 0.003 Ohm             |                 |                       |                 |
| Self Discharge                   | 3% of capacity declined per month at (20°C) |                 |                       |                 |
| Capacity Affected by Temp.(20HR) | 40°C  | 20°C            | 0°C                   | -15°C           |
|                                  | 102%  | 100%            | 85%                   | 65%             |
| Charge Voltage(20°C)             | Cycle use                                   |                 | Float use             |                 |
|                                  | 14.4-14.8V(-30mV/ °C), max. Current: 50A    |                 | 13.6-13.8V(-20mV/ °C) |                 |

12V-200AH Solar Series VRLA Battery



**Constant current discharge ratings-amperes at 20°C**

| F. V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 3HR  | 5HR  | 10HR | 20HR |
|-----------|------|-------|-------|-------|-----|------|------|------|------|
| 1.60V     | 700  | 480   | 350   | 210   | 132 | 54.6 | 38.2 | 21.2 | 11.1 |
| 1.67V     | 630  | 438   | 340   | 204   | 132 | 54.4 | 37.8 | 20.9 | 11.0 |
| 1.70V     | 598  | 422   | 328   | 200   | 131 | 54.4 | 37.8 | 20.7 | 11.0 |
| 1.75V     | 532  | 390   | 310   | 196   | 130 | 54.0 | 37.5 | 20.4 | 11.0 |
| 1.80V     | 480  | 362   | 296   | 190   | 128 | 53.8 | 37.2 | 20.0 | 10.6 |
| 1.85V     | 364  | 298   | 256   | 175   | 127 | 53.6 | 36.9 | 19.7 | 10.0 |

**Constant power discharge ratings-watts at 20°C**

| F. V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 3HR | 5HR  | 10HR | 20HR |
|-----------|------|-------|-------|-------|-----|-----|------|------|------|
| 1.60V     | 1154 | 796   | 620   | 396   | 260 | 105 | 73.0 | 42.4 | 22.1 |
| 1.67V     | 1094 | 786   | 614   | 388   | 251 | 105 | 73.0 | 41.8 | 22.1 |
| 1.70V     | 1022 | 766   | 604   | 378   | 245 | 105 | 73.0 | 41.5 | 22.1 |
| 1.75V     | 952  | 716   | 568   | 368   | 243 | 103 | 72.2 | 40.7 | 22.0 |
| 1.80V     | 854  | 666   | 534   | 358   | 238 | 102 | 71.0 | 40.0 | 21.2 |
| 1.85V     | 684  | 552   | 466   | 328   | 236 | 101 | 70.0 | 39.3 | 19.9 |

