

## Solar Series SLA Battery

## Solar Series

Bosfa Solar Series Valve-regulated Lead Acid batteries use particular alloy and material technology design to ensure a excellent performance in various environments, especially high and low temp. Bosfa Solar series batteries is optimal for storage and conversion of photovoltaic energy and wind energy.

## Application

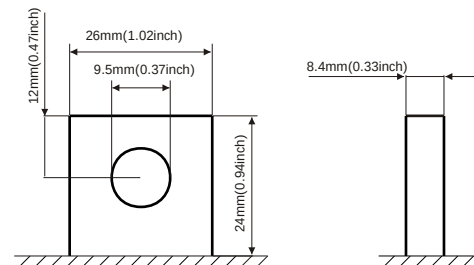
Photovoltaic system  
Alternative Energy System  
Electric Utility  
Outdoor control Equipment  
Railroad Utility

## General Features

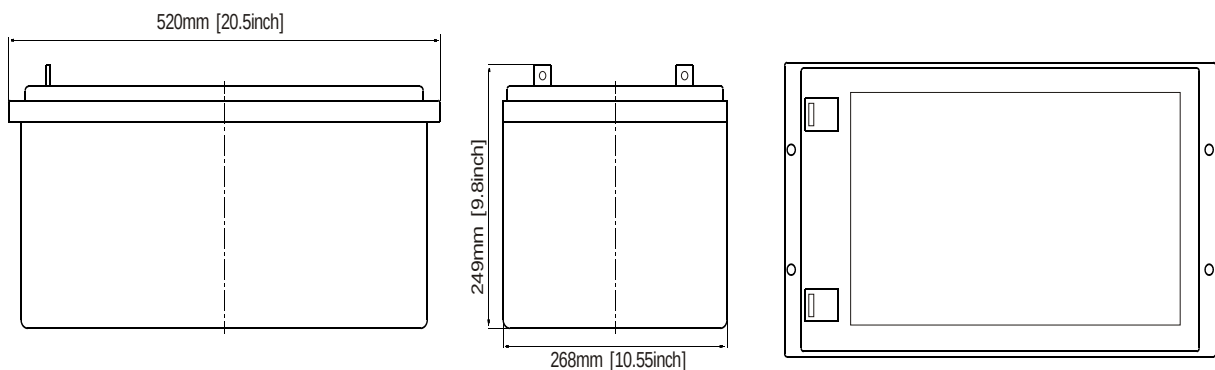
Sealed and maintenance free operation.  
Non-Spillable construction design.  
ABS containers and covers(UL94HB, UL94V-0) optional.  
Safety valve installation for explosion proof.  
High quality and high reliability.  
Exceptional deep discharge recovery performance.  
Low self discharge characteristic.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

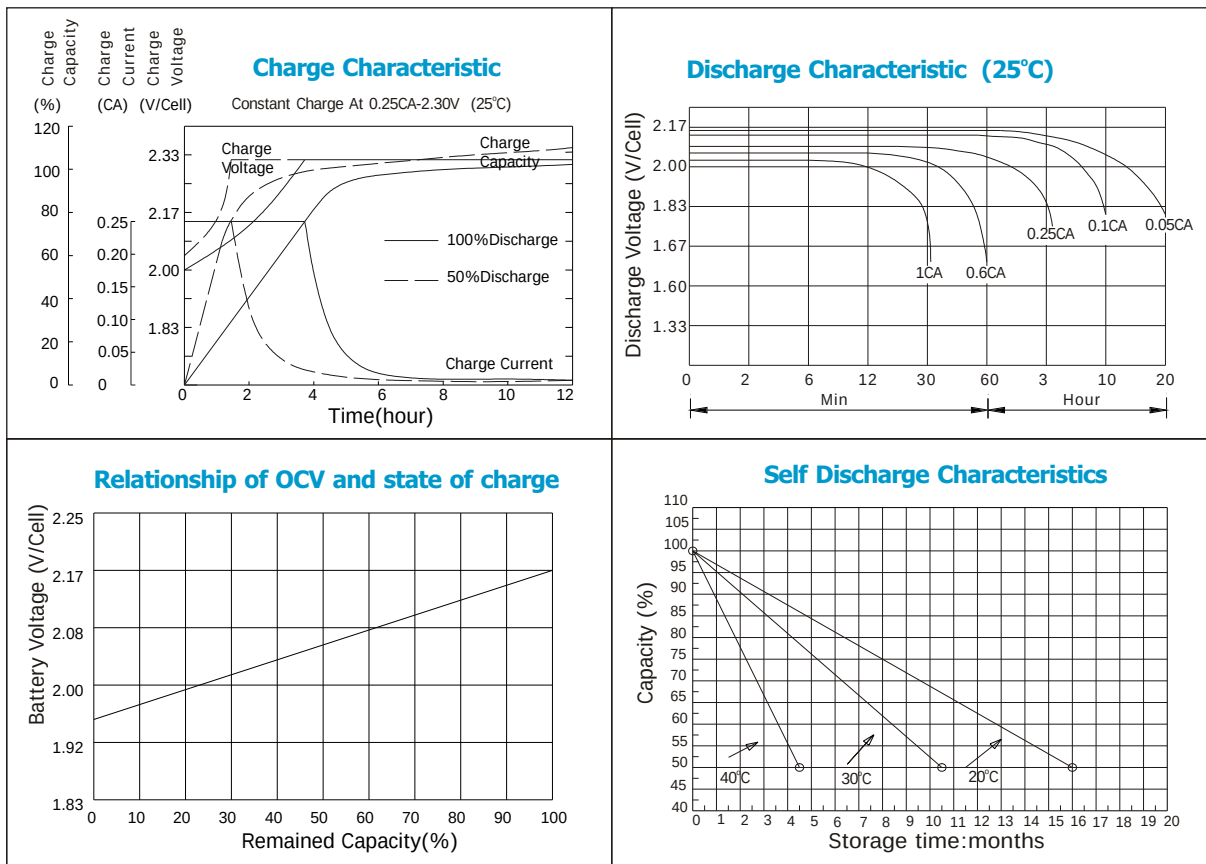


Terminal Dimensions



| Battery Model                    | Solar 12-250                                |                  |                       |                 |
|----------------------------------|---------------------------------------------|------------------|-----------------------|-----------------|
| Designed Floating Life           | 8 Years                                     |                  |                       |                 |
| Capacity(25°C)                   | 20HR(12.65A,1.75V)                          | 10HR(25A,1.75V)  | 5HR(213A,1.75V)       | 1HR(158A,1.75V) |
|                                  | 253AH                                       | 250AH            | 213AH                 | 158AH           |
| Dimensions                       | Length                                      | Width            | Height                | Total Height    |
|                                  | 520mm(20.47inch)                            | 268mm(10.55inch) | 220mm(8.66inch)       | 249mm(9.80inch) |
| Approx. Weight                   | 74Kg (163.17 lbs)                           |                  |                       |                 |
| Internal Resistance              | Full charged at 25°C: 0.004 Ohm             |                  |                       |                 |
| Self Discharge                   | 3% of capacity declined per month at (25°C) |                  |                       |                 |
| Capacity Affected by Temp.(20HR) | 40°C                                        | 25°C             | 0°C                   | -15°C           |
|                                  | 102%                                        | 100%             | 85%                   | 65%             |
| Charge Voltage(25°C)             | Cycle use                                   |                  | Float use             |                 |
|                                  | 14.4-15V(-30mV/ °C), max. Current: 50A      |                  | 13.6-13.8V(-20mV/ °C) |                 |

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## Constant current discharge ratings-amperes at 25°C

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 3HR  | 5HR  | 10HR | 20HR |
|----------|------|-------|-------|-------|-----|------|------|------|------|
| 1.60V    | 875  | 600   | 438   | 263   | 165 | 68.3 | 47.7 | 26.5 | 13.2 |
| 1.67V    | 788  | 548   | 425   | 255   | 165 | 68.0 | 47.3 | 26.1 | 13.1 |
| 1.70V    | 748  | 528   | 410   | 250   | 164 | 68.0 | 47.3 | 25.9 | 13.1 |
| 1.75V    | 665  | 488   | 388   | 245   | 163 | 67.5 | 46.9 | 25.5 | 13.1 |
| 1.80V    | 600  | 453   | 370   | 238   | 161 | 67.3 | 46.5 | 25.0 | 12.6 |
| 1.85V    | 455  | 373   | 320   | 219   | 159 | 67.0 | 46.2 | 24.6 | 11.9 |

## Constant power discharge ratings-watts at 25°C

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 3HR | 5HR  | 10HR | 20HR |
|----------|------|-------|-------|-------|-----|-----|------|------|------|
| 1.60V    | 1443 | 995   | 775   | 495   | 325 | 131 | 91.3 | 53.0 | 26.4 |
| 1.67V    | 1368 | 983   | 768   | 485   | 314 | 131 | 91.3 | 52.2 | 26.3 |
| 1.70V    | 1278 | 958   | 755   | 473   | 306 | 131 | 91.3 | 51.8 | 26.3 |
| 1.75V    | 1190 | 895   | 710   | 460   | 303 | 129 | 90.3 | 50.9 | 26.1 |
| 1.80V    | 1068 | 833   | 668   | 448   | 298 | 127 | 88.8 | 50.0 | 25.2 |
| 1.85V    | 855  | 690   | 583   | 410   | 295 | 127 | 87.5 | 49.2 | 23.7 |

