

# SPG Series

## SPG12-490W 12V135Ah

SPG series VRLA battery uses AGM technology and high-purity raw materials. It has good high power discharge, floating backup and fast charging performance. It is mainly used in UPS/EPS standby power supply systems. It can backup power in poor operation environment.

### Benefits

- Long life according to EUROBAT Classification
- Maximun charge efficiency
- High gas recombination efficiency
- Low self-discharge rate
- Vertical installization

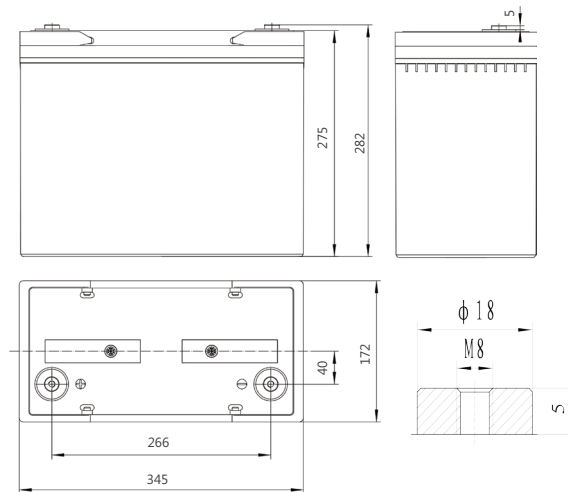
### Applications

- UPS units
- Data center
- Starting generators
- EPS units

### Standards

- IEC 60896-21/22
- JIS C8704-1/2
- EUROBAT guide

### Drawing



SP-29

### Specifications

|                                      |  |                |                       |                    |
|--------------------------------------|--|----------------|-----------------------|--------------------|
| Battery Model                        | SPG12-490W   |                |                       |                    |
| Design Life (years, 25°C)            | 12   |                |                       |                    |
| Capacity (Ah, 25°C)                  | 10min ( 1.60V)   | 15min ( 1.67V) | 1HR (81A, 1.75V)      | 10HR 13.5A, 1.80V) |
|                                      | 588W/cell  | 490W/cell      | 81Ah                  | 135Ah              |
| Dimensions (mm)                      | Length   | Width          | Height                | Total Height       |
|                                      | 345  | 172            | 275                   | 282                |
| Approx. Weight (kg)                  | 42.5   |                |                       |                    |
| Reference Internal Resistance (mΩ)   | 3.6±15%( full charged @ 25°C,testing device:HIOKIBT3562) |                |                       |                    |
| Maximum Discharge Current (A/3 Sec.) | 1485   |                |                       |                    |
| Self-Discharge (25°C)                | ≤ 2 % per month  |                |                       |                    |
| Charge Voltage (V/cell, 25°C)        | Cycle use  |                | Float use             |                    |
|                                      | 2.40 (-3.5mV/°C/cell), max charge current:40.5A          |                | 2.27 (-3.5mV/°C/cell) |                    |
| Short Circuit Current (A)            | 3300( for reference only )                               |                |                       |                    |

## Discharge Data

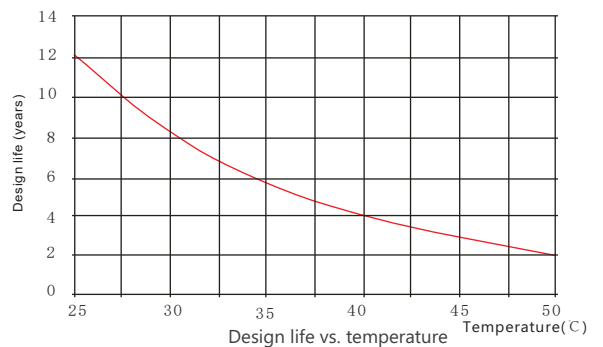
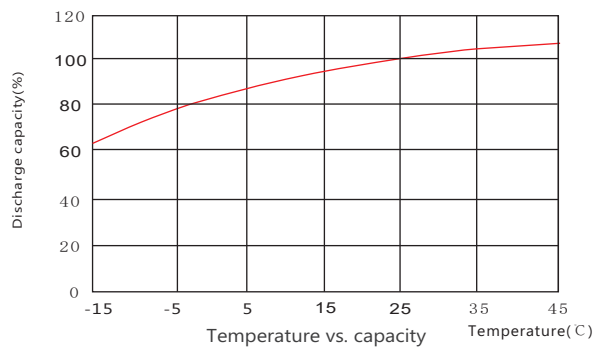
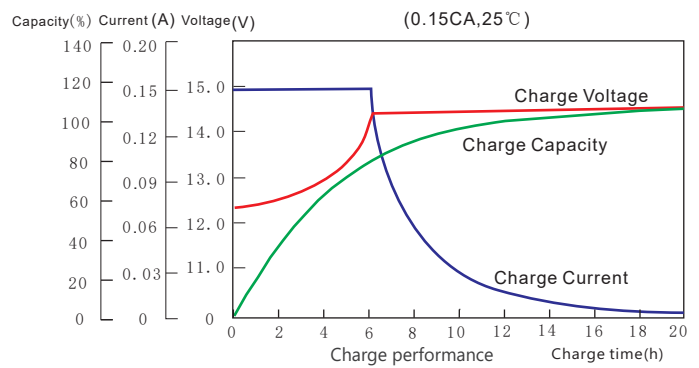
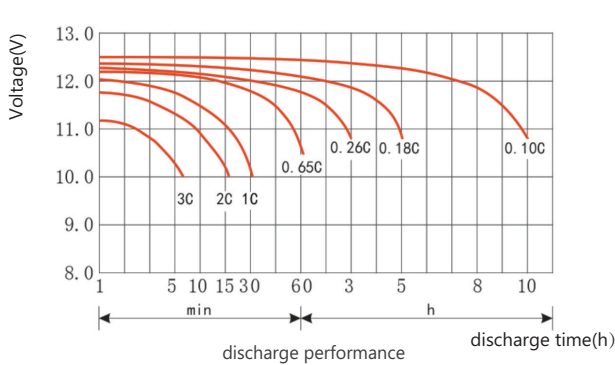
**Constant Current Discharge Data (25°C, A)**

| End Voltage (V/cell) | min |     |     |     |     |      | h    |      |      |      |      |      |      |      |
|----------------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|
|                      | 10  | 15  | 20  | 25  | 30  | 45   | 1    | 1.5  | 2    | 3    | 4    | 5    | 6    | 10   |
| 1.60                 | 340 | 278 | 226 | 192 | 158 | 116  | 89.7 | 73.5 | 55.6 | 39.5 | 30.3 | 24.8 | 21.0 | 14.0 |
| 1.65                 | 327 | 268 | 218 | 186 | 153 | 113  | 86.8 | 71.8 | 54.5 | 38.3 | 29.4 | 24.4 | 20.8 | 14.9 |
| 1.67                 | 316 | 260 | 213 | 180 | 148 | 110  | 85.2 | 70.4 | 53.4 | 37.6 | 28.5 | 24.0 | 20.6 | 13.8 |
| 1.70                 | 306 | 250 | 207 | 174 | 144 | 108  | 83.5 | 69.2 | 52.6 | 36.8 | 28.3 | 23.7 | 20.5 | 13.7 |
| 1.75                 | 288 | 240 | 196 | 166 | 138 | 103  | 81.0 | 67.0 | 51.3 | 35.8 | 27.7 | 23.5 | 20.2 | 13.6 |
| 1.80                 | 268 | 226 | 185 | 158 | 130 | 99.0 | 77.7 | 64.6 | 49.6 | 34.3 | 26.8 | 22.8 | 19.8 | 13.5 |

**Constant Power Discharge Data (25°C, W/CELL)**

| End Voltage (V/cell) | min |     |     |     |     |     | h   |     |      |      |      |      |      |      |
|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
|                      | 10  | 15  | 20  | 25  | 30  | 45  | 1   | 1.5 | 2    | 3    | 4    | 5    | 6    | 10   |
| 1.60                 | 588 | 524 | 426 | 367 | 316 | 237 | 190 | 148 | 106  | 77.3 | 61.5 | 52.4 | 45.8 | 28.8 |
| 1.65                 | 563 | 510 | 413 | 360 | 308 | 232 | 184 | 144 | 104  | 75.0 | 60.5 | 52.0 | 45.2 | 28.4 |
| 1.67                 | 542 | 490 | 398 | 353 | 304 | 227 | 180 | 140 | 101  | 73.5 | 59.6 | 50.3 | 44.0 | 27.8 |
| 1.70                 | 522 | 474 | 384 | 340 | 296 | 223 | 177 | 137 | 100  | 71.8 | 58.8 | 49.8 | 43.7 | 27.4 |
| 1.75                 | 500 | 457 | 370 | 328 | 288 | 218 | 172 | 133 | 98.0 | 70.7 | 58.2 | 48.8 | 42.7 | 26.8 |
| 1.80                 | 476 | 437 | 354 | 317 | 277 | 212 | 165 | 130 | 95.2 | 69.4 | 56.8 | 47.4 | 41.6 | 26.0 |

## Performance Curve



**Sacred Sun Power Sources Co., Ltd.**

Add: No.1 Shengyang Road, Qufu 273100 PRC  
 Tel: +86-537-4422313 Fax: +86-537-4411980  
 Email: sales@sacredsun.cn

**Sacred Sun Hong Kong Co., Limited**

Add: RM 19C Lockhart CTR 301-307 Lockhart RD Wan Chai, Hong Kong  
 Email: admin.hk@sacredsun.hk

**Sacred Sun Asia Pacific Pte Ltd.**

Add: 1 Ubi View, #04-12, Focus One, Singapore 408555  
 Email: admin.sg@sacredsun.sg

**Sacred Sun Europe SARL**

Add: ZAE Fontaine, 33210 Fargues, France  
 Email: admin.eu@sacredsun.eu

**Sacred Sun MEA FZE**

Add: No. 311 office, Building LOB 14, JAFZA, Dubai, UAE  
 Email: admin.ae@sacredsun.ae

