

# FT Series

## FTA12-190 12V190Ah

Sacred Sun front terminal batteries have been designed specifically for applications which demand the highest levels of security and reliability. The monoblocs have excellent high rate performance, compact design and standard footprint for 19" and 23" cabinets. Thick Pb-Ca-Sn alloy grids are designed to resist corrosion and prolong service life.

### Benefits

- Long life according to EUROBAT Classification
- High discharge performance
- High gas recombination efficiency
- Maximum charge efficiency
- Low self-discharge rate
- Easy installation and handling
- Centralized venting system

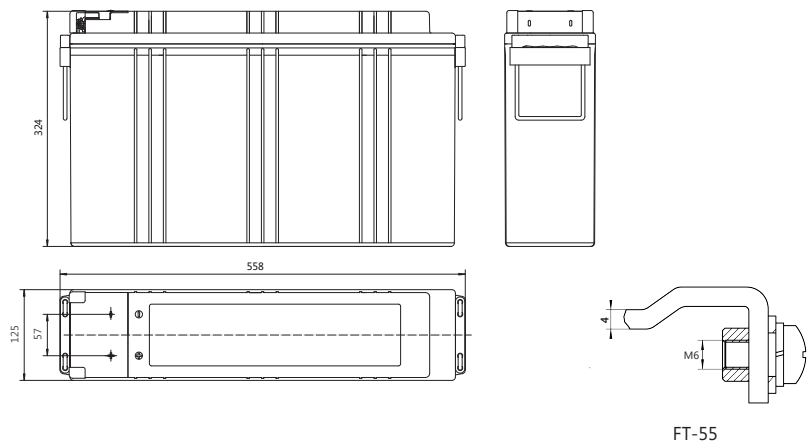
### Applications

- Telecommunications
- Power system
- UPS
- Emergency power
- Data center

### Standards

- IEC 60896-21/22
- BS 6290-4
- EUROBAT guide

### Drawing



### Specifications

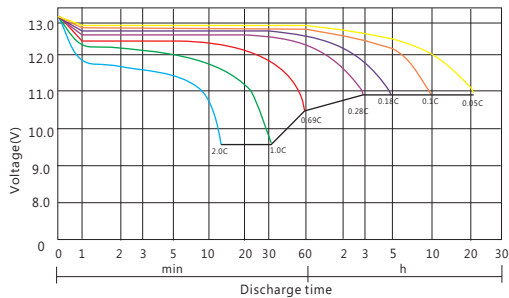
|                                      |   |                     |                       |                    |
|--------------------------------------|---|---------------------|-----------------------|--------------------|
| Battery Model                        | FTA12-190   |                     |                       |                    |
| Design Life (years, 25°C)            | 12  |                     |                       |                    |
| Capacity (Ah, 25°C)                  | 10HR (19.0A, 1.80V)   | 5HR (33.80A, 1.80V) | 3HR (49.70A, 1.80V)   | 1HR(106.1A, 1.75V) |
|                                      | 190.0   | 169.0               | 149.1                 | 106.1              |
| Dimensions (mm)                      | Length  | Width               | Height                | Total Height       |
|                                      | 558   | 125                 | 324                   | 324                |
| Approx. Weight (kg)                  | 57.0  |                     |                       |                    |
| Reference Internal Resistance (mΩ)   | 3.3 ±15% ( fully charged @ 25°C, Testing device: HIOKIBT3562) |                     |                       |                    |
| Maximum Discharge Current (A/3 Sec.) | 1500  |                     |                       |                    |
| Self-Discharge (25°C)                | ≤ 1.5% per month  |                     |                       |                    |
| Charge Voltage (V/cell, 25°C)        | Cycle use   |                     | Float use             |                    |
|                                      | 2.35 (-3.5mV/°C/cell), max charge current: 38A                |                     | 2.25 (-3.5mV/°C/cell) |                    |
| Short Circuit Current (A)            | 3650  |                     |                       |                    |

## Discharge Data

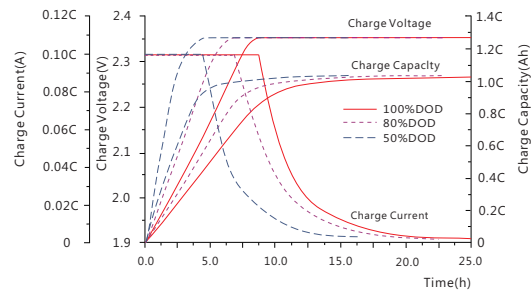
| Constant Current Discharge Data (25°C, A) |       |       |       |       |       |       |      |       |      |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|------|-------|------|-------|-------|-------|-------|-------|
| End Voltage (V/cell)                      | min   |       |       |       |       | h     |      |       |      |       |       |       |       |       |
|   | 5     | 10    | 15    | 30    | 45    | 1     | 2    | 3     | 4    | 5     | 6     | 8     | 10    | 20    |
| 1.60                                      | 506.0 | 385.7 | 306.6 | 198.3 | 141.3 | 116.3 | 75.4 | 53.70 | 43.8 | 35.30 | 30.10 | 23.40 | 19.60 | 10.60 |
| 1.65                                      | 490.5 | 374.4 | 300.5 | 190.0 | 139.6 | 112.5 | 73.7 | 52.10 | 43.1 | 34.90 | 30.10 | 23.30 | 19.4  | 10.50 |
| 1.70                                      | 450.9 | 346.0 | 290.1 | 186.0 | 138.3 | 108.9 | 71.8 | 51.20 | 42.3 | 34.60 | 29.70 | 23.00 | 19.3  | 10.30 |
| 1.75                                      | 415.6 | 317.1 | 274.0 | 183.0 | 137.8 | 106.1 | 70.7 | 50.60 | 41.6 | 34.20 | 29.40 | 22.80 | 19.10 | 10.25 |
| 1.80                                      | 370.7 | 294.6 | 262.4 | 163.9 | 123.7 | 98.3  | 68.7 | 49.70 | 41.3 | 33.80 | 29.10 | 22.50 | 19.0  | 10.20 |

| Constant Power Discharge Data (25°C, W/cell) |       |       |       |       |       |       |       |       |      |       |       |       |       |       |
|--|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| End Voltage (V/cell)                         | min   |       |       |       |       | h     |       |       |      |       |       |       |       |       |
|  | 5     | 10    | 15    | 30    | 45    | 1     | 2     | 3     | 4    | 5     | 6     | 8     | 10    | 20    |
| 1.60   | 882.6 | 710.2 | 570.0 | 412.5 | 295.2 | 237.8 | 150   | 110.0 | 83.8 | 67.50 | 57.90 | 44.90 | 32.65 | 20.40 |
| 1.65   | 844.0 | 668.4 | 550.0 | 389.3 | 290.6 | 231.4 | 147.8 | 107.0 | 82.7 | 67.20 | 57.70 | 44.70 | 32.5  | 20.30 |
| 1.70   | 802.2 | 622.3 | 520.0 | 387.0 | 283.0 | 220.7 | 144.6 | 104.0 | 81.6 | 66.90 | 57.40 | 44.40 | 32.2  | 20.10 |
| 1.75   | 756.3 | 583.7 | 483.0 | 384.0 | 276.8 | 216.4 | 143.6 | 103.0 | 80.7 | 66.40 | 57.00 | 44.20 | 32.00 | 19.90 |
| 1.80   | 703.7 | 562.3 | 473.0 | 340.0 | 249.1 | 208.9 | 140.3 | 100.0 | 80.3 | 65.70 | 56.60 | 43.90 | 31.8  | 19.80 |

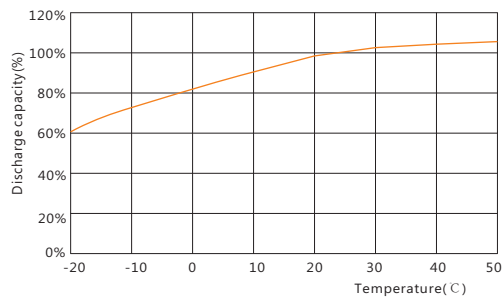
## Performance Curve



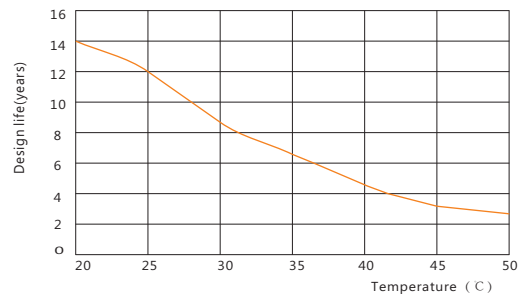
Discharge voltage vs. discharge time



Charge capacity vs. charge time



Discharge capacity vs. temperature



Design life vs. temperature

### 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 SARRL

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

