

# Li-SO<sub>2</sub> primary battery system

## BA 5590 A/U

With state of charge indicator (SOCi)

10 LO 26 SX cells connected in 2 groups of 5 cells in series providing 2 nominal 12 V sections at connector. These sections can be connected in series (for 24 V) in parallel (for 12 V) or used as two separate 12 V units.

### Key features

- A non-replaceable fuse is incorporated in the negative leg of each series group of cells.
- A normally closed high temperature switch or thermal fuse is incorporated into each series group of cells to protect against overheating.
- A diode is incorporated into each series group of cells to prevent charging or flow of current into the battery.
- A device consisting of a manually activated pull tab and resistors designed to discharge the battery to 0 V is built into the battery.
- A microprocessor based state of charge indicator shows the remaining capacity. The SOCi includes a LED display and push button activation. The SOCi is discharge rate and temperature compensated.

### Typical applications

- AN/PRC-104 Radio
- AN/PRC-113 Radio
- AN/PRC-117 Radio
- AN/PRC-119 Singcars Radio
- KY-57, KY-65 Encryption Set
- REMBASS Remotely Monitored Battlefield Surveillance System
- PLRS Position Locator and Reporting System
- RT-991 Buoy Radio
- RT-1175 Buoy Radio
- AN/TAS-4A TOW Night Sight



### Electrical characteristics

Typical OCV (V)	15.0 or 30.0
Nominal voltage (at 500 mA) (V)	13.5 or 27.0
Cut-off (V)	10.0 or 20.0
Typical capacity +21°C/+70°F (at 250 mA discharge current)	15 Ah at 12 V 7.5 Ah at 24 V
Operating temperature	-40°C to +71°C -40°F to +160°F
Storage	Recommended max Possible
	+35°C / +95°F -40°C to +71°C / -40°F to +160°F

### Physical characteristics

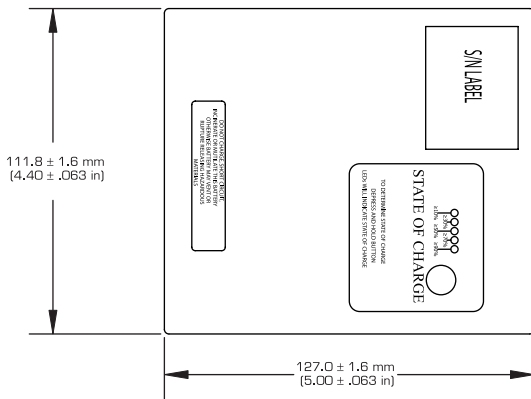
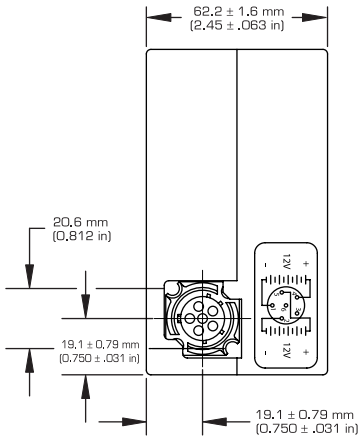
Typical Weight (g/oz)	1000 / 35.3
Weight of Li metal content (g/oz)	24 / 0.85
Width (mm/in)	62.2 / 2.45
Height (mm/in)	111.8 / 4.40
Depth (mm/in)	127.0 / 5.00
Battery Case	Plastic

### References

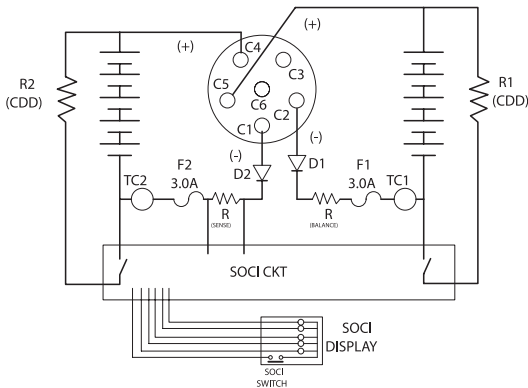
Mating connector	ITT Cannon CA 110821- 6
Reference specifications	MIL PRF 49471B or Saft Standard Specification
NSN reference	6135-01-523-3037



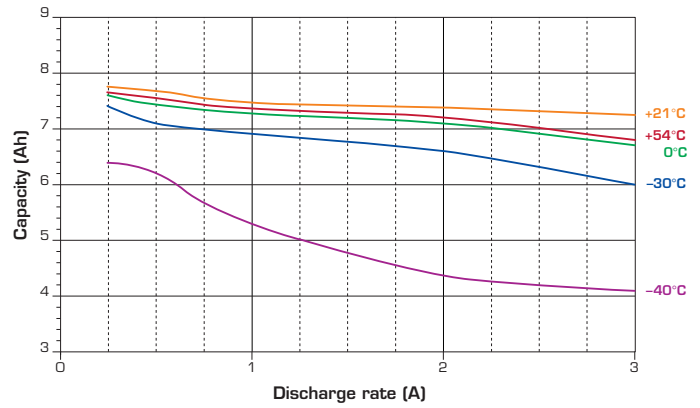
## BA 5590 A/U dimensions



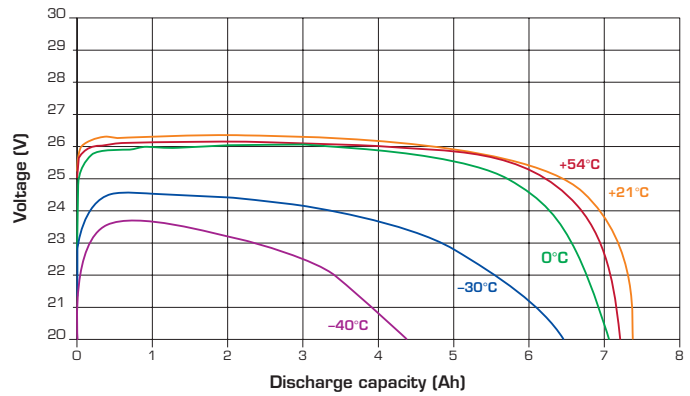
## Electrical schematic



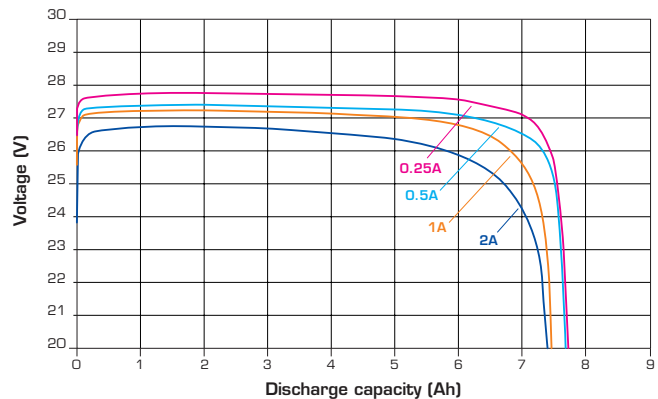
## Capacity vs rate at various temperatures



## 2 A discharge typical curves at various temperatures (24 V mode)



## Typical discharge curves at various rates at +21°C/+70°F



## Saft Specialty Battery Group

12, rue Sadi Carnot  
93170 Bagnole - France  
Tel: +33 (0)1 49 93 19 18  
Fax: +33 (0)1 49 93 19 69

313 Crescent Street  
Valdese, NC 28690 - USA  
Tel: +1 (828) 874 4111  
Fax: +1 (828) 874 3981

[www.saftbatteries.com](http://www.saftbatteries.com)

Doc N° 31076-2-0906

Data in this document is subject to change without notice and becomes contractual only after written confirmation.

Société anonyme au capital de 31 944 000 €  
RCS Bobigny B 383 703 873

Pragma - Printed in France



**SAFT**