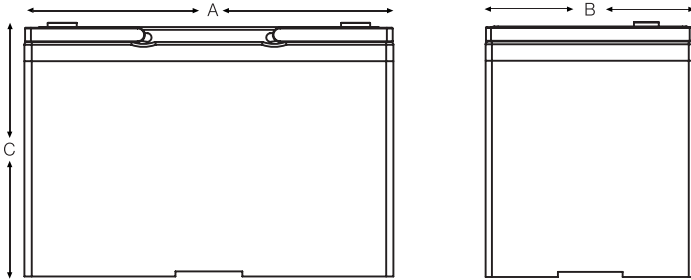
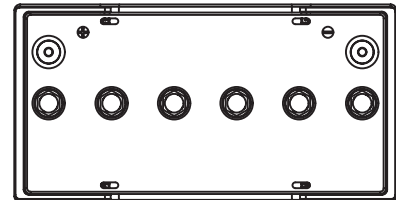


# S06-12-125

## Gel Solar Bloc Battery



Left - Positive Right - Negative



### Electrical Specifications

<b>Voltage</b>	12V
<b>80% DOD Voltage Cutoff</b>	11.2V
<b>Low Voltage Cutoff</b>	10.8V
<b>Self Discharge</b>	Less than 3% per month (20°C/68°F)
<b>Charge Temperature</b>	Min: -10°C (14°F) / Max: 50°C (122°F)
<b>Discharge Temperature**</b>	Min: -40°C (-40°F) / Max: 50°C (122°F)
<b>Storage</b>	Min: -20°C (-4°F) / Max: 60°C (140°F)

Cell Type Ue (100%) / VPC Ref Temp	C100 1.80 25°C	C20 1.75 25°C	C10 1.75 25°C	C5 1.70 25°C
S06 12 125	130	123	116	108

\*\* CAUTION: Depths of discharge, operating voltages and currents, when designing systems for use at maximum temperatures, will vary.

### Mechanical Specifications

Industry Reference	BCI12 / 5SHP	
<b>Length (A)</b>	13 in	329 mm
<b>Width (B)</b>	6.7 in	170 mm
<b>Height (C)</b>	10.2 in	258 mm
<b>Weight</b>	93 lbs	42 kgs
<b>Terminal (Opt'l)*</b>	M8	
<b>Cell(s)</b>	6	
<b>Electrolyte</b>	Gel	
<b>Terminal Torque Nm</b>	8	

NOTE: There is a tolerance of +/-2%.

### Terminal Options Available:

- M8
- A-Pole
- Dual
- Stud

### Features

Maintenance-free bloc batteries in Gel technology (no topping up during lifetime)

Good high current performance for extreme operating conditions

High-class patented safety valve

1200 cycles (IEC 61427 / 60896-21/22)

Capacity: 12V 55Ah-220Ah(C<sub>20</sub>)

Valve-regulated lead-acid battery

Recyclable

Long cycle life

Low self discharge rate allows for up to 2 years shelf life

Classified as a non-spillable battery is not restricted for transportation by:

- Air (IATA/ICAO provision 67)
- Ground (STB, DOT-CFR-HMR49)
- Water (IMDG amendment 27)

### Applications

Solar

Home Inverter

Renewable Energy

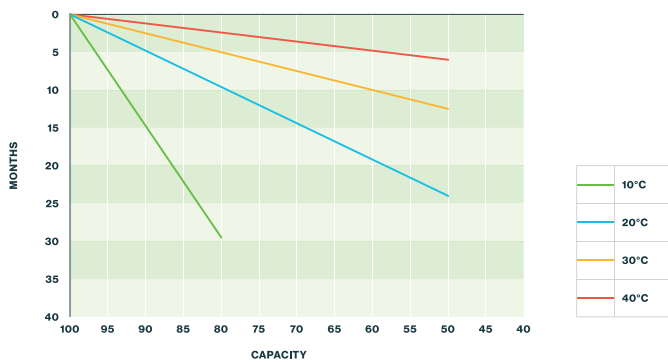
Deep Cycle Applications

## Charging profile

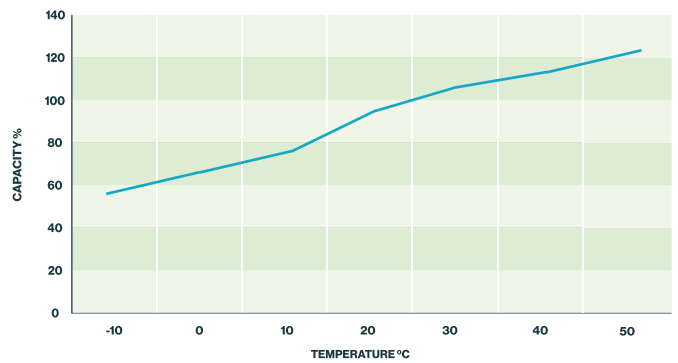
**IU Charging** I = min. 12% C<sub>5</sub> max. 18% C<sub>5</sub>  
U = 2.4 V per cell

**IUI Charging** I<sub>1</sub> = min. 12% C<sub>5</sub> max. 18% C<sub>5</sub>  
U = 2.35 V per cell  
I<sub>2</sub> = 1.5% C<sub>5</sub> for max. 4 hours

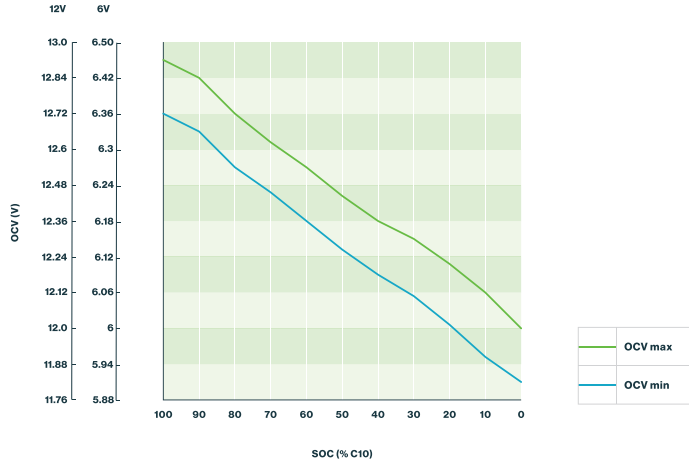
### Self discharge at different temperatures



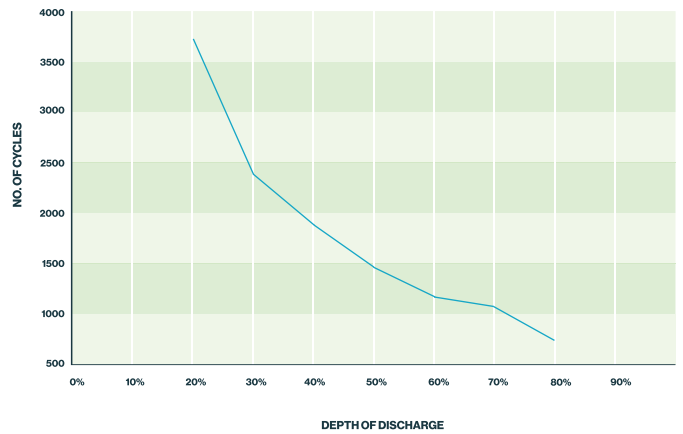
### Capacity vs. temperature



### Storage: Determine the state of charge



### Cycle life vs. depth of discharge (25°C)



### Relation between charging, voltage and temperature

