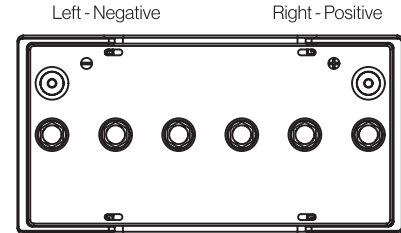
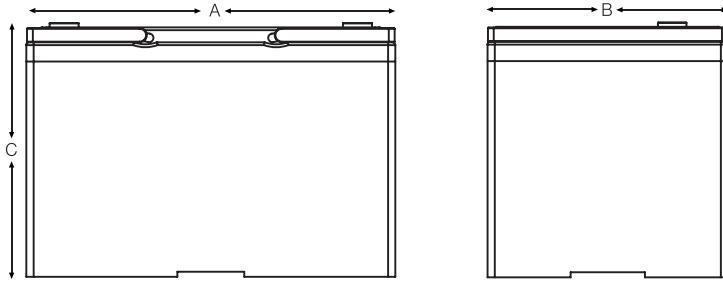


S06-12-90

Gel Solar Bloc Battery



Electrical Specifications

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

Cell Type Ue (100%) / VPC Ref Temp	C120	C100	C72	C20	C10	C5
	1.80	1.80	1.80	1.75	1.75	1.70
	25°C	25°C	25°C	25°C	25°C	25°C
S061290	103	100	96	94	88	85

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

Mechanical Specifications

Industry Reference	BCI 31	
Length (A)	13 in	329 mm
Width (B)	6.7 in	170 mm
Height (C)	8.1 in	205 mm
Weight	71 lbs	32 kgs
Terminal (Opt'l)*	M8	
Cell(s)	6	
Electrolyte	Gel	
Terminal Torque Nm	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(C₂₀)

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

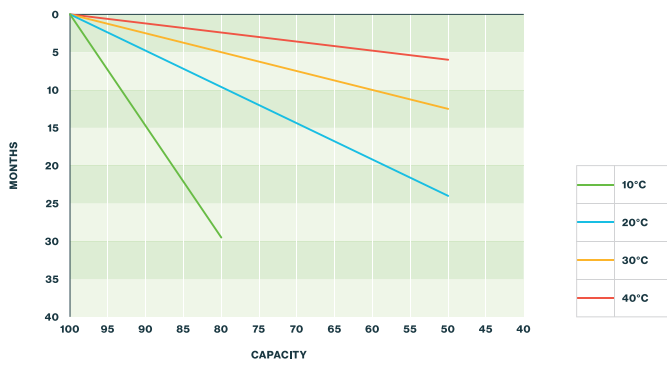
Deep Cycle Applications

Charging profile

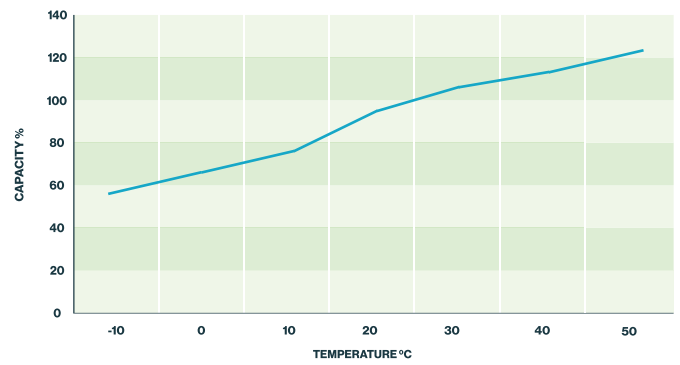
IU Charging I = min. 12% C₅ max. 18% C₅
U = 2.4 V per cell

IUI Charging I₁ = min. 12% C₅ max. 18% C₅
U = 2.35 V per cell
I₂ = 1.5% C₅ for max. 4 hours

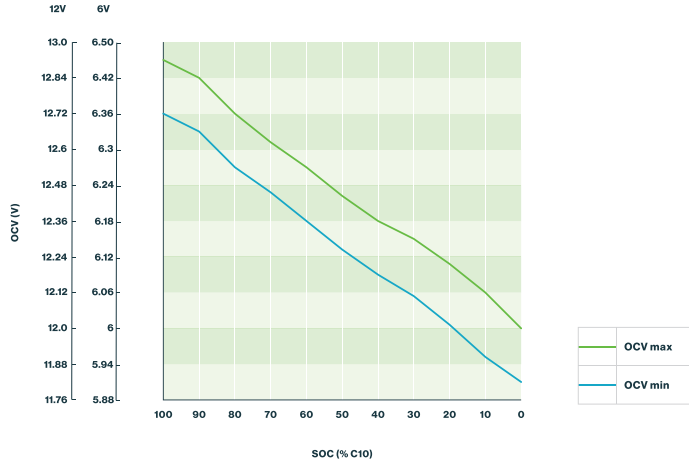
Self discharge at different temperatures



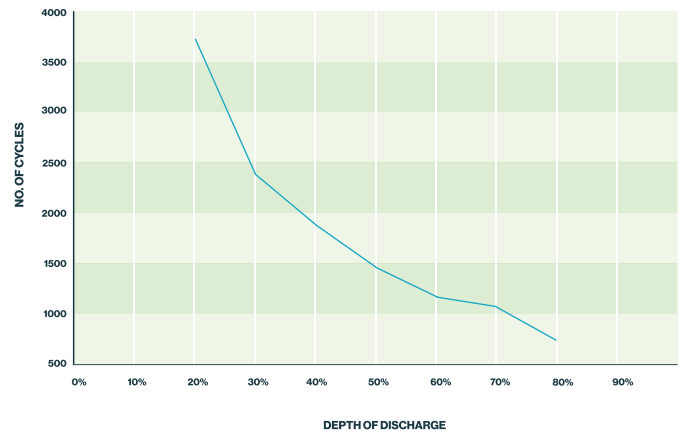
Capacity vs. temperature



Storage: Determine the state of charge



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



Relation between charging, voltage and temperature

