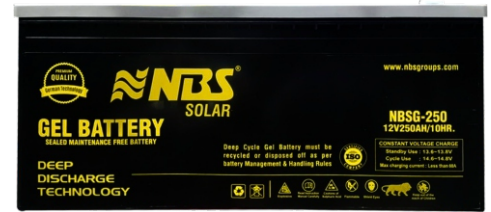
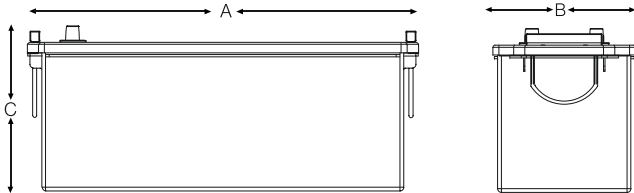


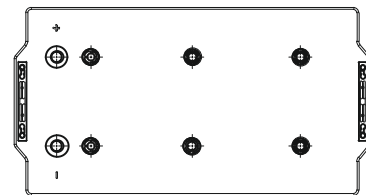


NBSG-12-250

Gel Solar Bloc Battery



Positive



Negative

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)

250AH Amp Hours (AH)					
120 HR	100 HR	72 HR	20 HR	10 HR	5 HR
235	230	221	212	200	177

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

Mechanical Specifications

Industry Reference	DIN C	
Length (A)	20.4 in	518 mm
Width (B)	10.8 in	274 mm
Height (C)	9.4 in	238 mm
Weight	150 lbs	68 kgs
Terminal (Optl)*	A-Pole (Industrial Terminal optional)	
Cell(s)	6	
Electrolyte	Gel	
Terminal Torque Nm	n/a	

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

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-250Ah(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

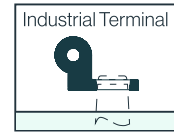
Deep Cycle Applications

Charging profile

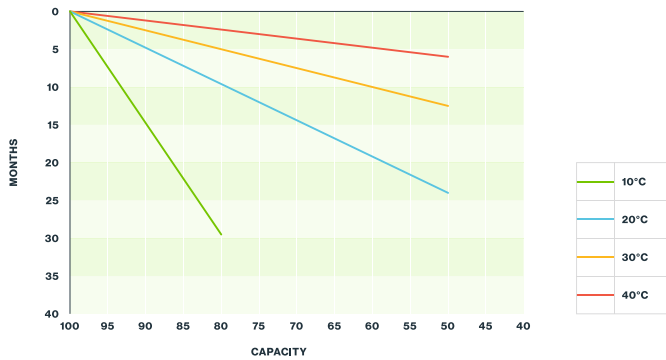
IU Charging $I = \text{min. } 12\% C_5 \text{ max. } 18\% C_5$
 $U = 2.4 \text{ V per cell}$

IUI Charging $I_1 = \text{min. } 12\% C_5 \text{ max. } 18\% C_5$
 $U = 2.35 \text{ V per cell}$
 $I_2 = 1.5\% C_5 \text{ for max. 4 hours}$

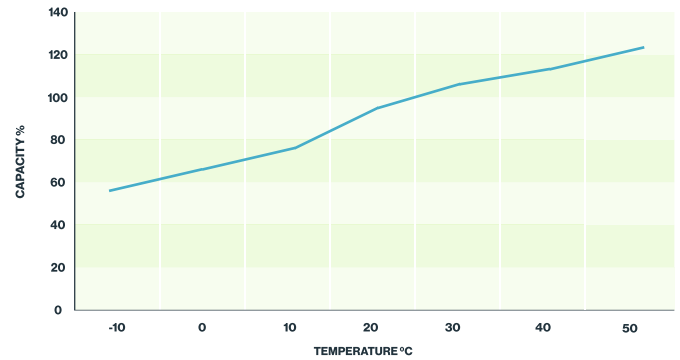
Torque



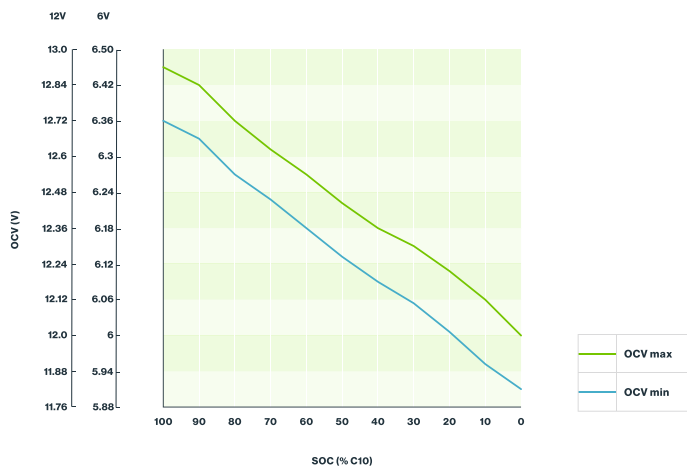
Self discharge at different temperatures



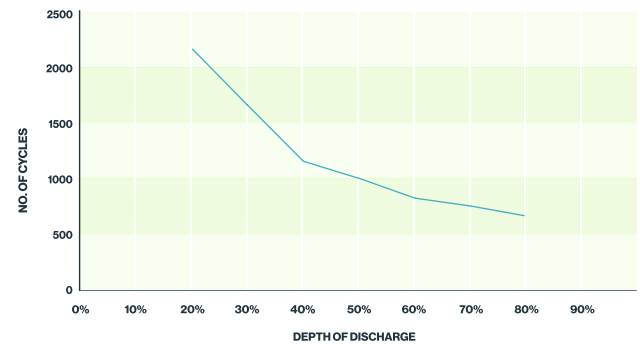
Capacity vs. temperature



Storage: Determine the state of charge



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



Relation between charging, voltage and temperature

