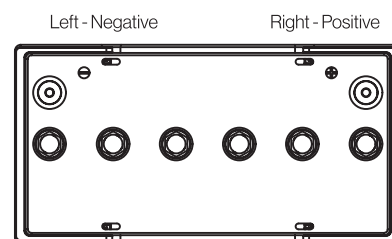
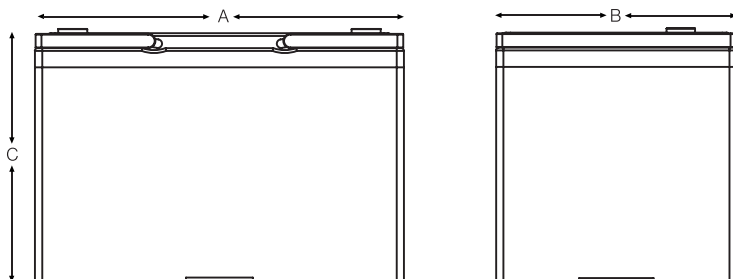


EQ-31M

Carbon Nano Gel Bloc



Electrical Specifications

Voltage	12V
M.R.C. 25 Amps	170
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)
Charge Methods	Float Voltage: 2.25 @ 25°C / 77°F Boost Voltage: 2.35 to 2.40VPC @ 25°C / 77°F
Temperature Compensation	±3.5mV/°C/Cell

Cell Type Ue (100%) / VPC Ref Temp	C5 1.70 25°C	C10 1.75 25°C	C20 1.75 25°C	C100 1.80 25°C
EQ-31M	85	88	94	100

** 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	170mm
Height (C)	8.1 in	205mm
Weight	65 lbs	29.5 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 - no topping up required

Ultra energy efficient due to low resistance

Reduced operating temperatures for increased cycle life (up to 1000 cycles) and battery lifetime

Cost savings due to increased efficiency

Up to 2 x faster recharge

Increased design life from 12 to 15 years

Allows for opportunity charging to give you those extra running times when required

Suitable for extreme temperature variants

Applications: all motive, leisure & solar:

Electric vehicles, including cleaning machines

Wheelchairs

Electric Working Platforms

UPS Systems

Traffic Systems

Telecommunications & Emergency Lighting

Caravans / Motorhomes RV's & Maritime

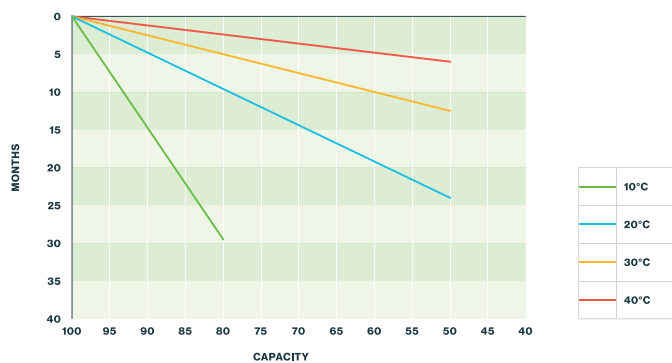
Solar & Renewable Energy & Home Inverter

Charging profile

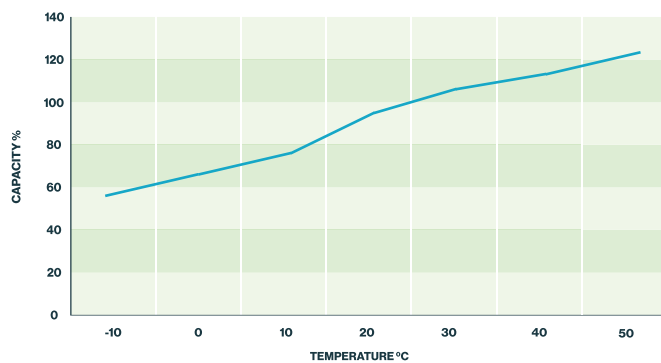
IU Charging $I = \text{min. } 12\% C_5 \text{ max. } 30\% C_5$
 $U = 2.4 \text{ V per cell}$

IUI Charging $I_1 = \text{min. } 12\% C_5 \text{ max. } 40\% C_5$
 $U = 2.35 \text{ V per cell}$
 $I_2 = 1.5\% C_5 \text{ for max. 4 hours}$

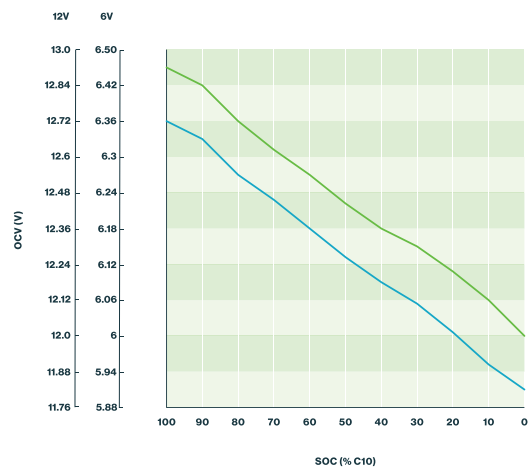
Self discharge at different temperatures



Capacity vs. temperature

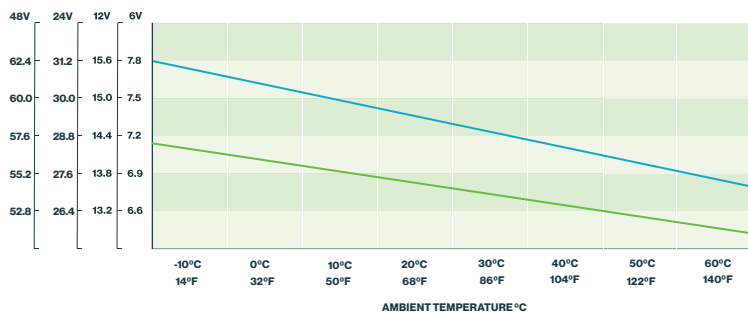


Storage: Determine the state of charge



OCV max
OCV min

Relation between charging, voltage and temperature



STANDBY USE
CYCLE USE