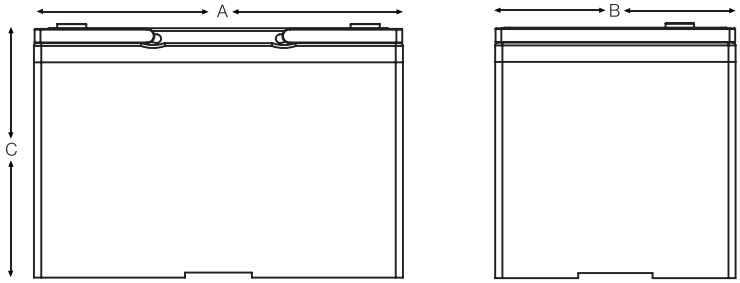
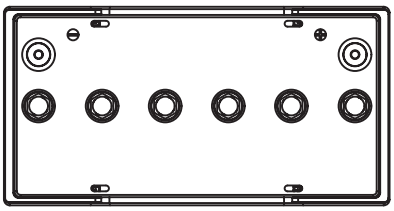
EQ-31M

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 ± 5%

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:

- Cleaning machines
- Wheelchairs
- Electric Working Platforms
- UPS Systems
- Traffic Systems
- Telecommunications & Emergency Lighting
- Caravans / Motorhomes RV's & Maritime
- Solar & Renewable Energy & Home Inverter

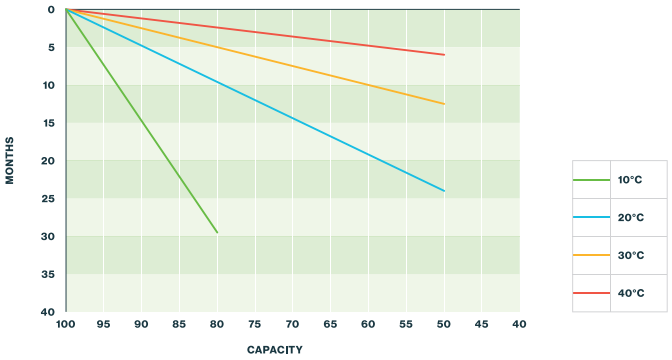
Compliant with IEC 60254-1 & IEC 60254-2

Charging profile

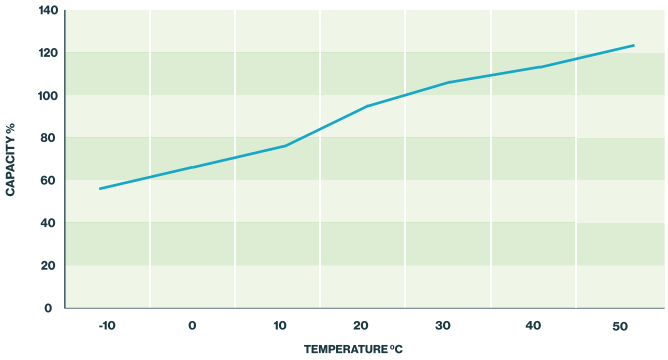
IU Charging
I = min. 12% C_5 max. 30% C_5
U = 2.4 V per cell

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

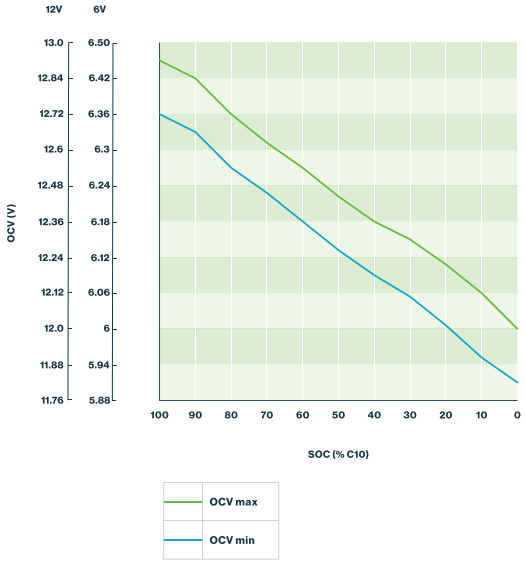
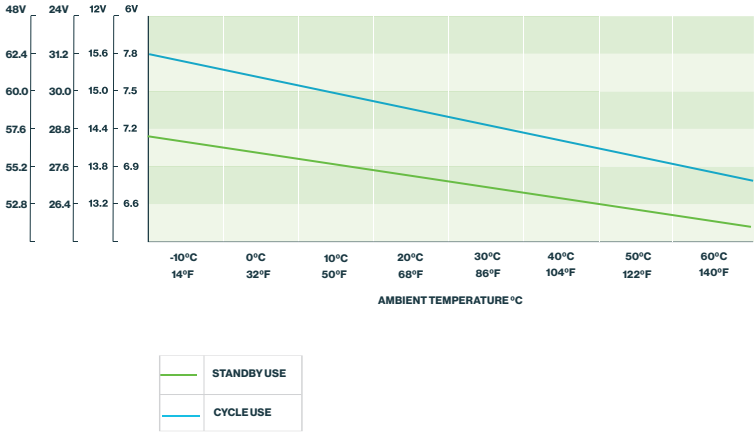
Self discharge at different temperatures



Capacity vs. temperature



Storage: Determine the state of charge



Relation between charging, voltage and temperature