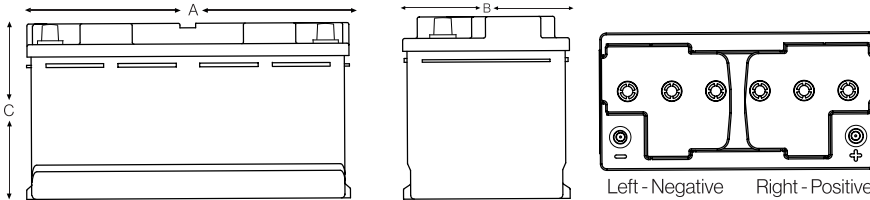


EQM-49/H8

Carbon Nano Gel Battery



Benefits:

- Cost savings due to increased efficiency in charging
- Reduced Temperature gives longer life
- Long life, high reliability
- Reduces drying out – extends life
- Sulphation reduction, less need to top charge
- Can be installed in tight spaces
- Almost Totally Green – recycled – scrap value
- Reduced premature failure, extended life
- Suitable for extreme temperature variants

Electrical Specifications

Voltage	12V
M.R.C. 25 Amps	155
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	C5 1.70 25°C	C10 1.75 25°C	C20 1.75 25°C	C100 1.80 25°C
EQ-49/H8	73	77	81	85

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

Mechanical Specifications

Industry Reference	L5	
Length (A)	13.8 in	350 mm
Width (B)	6.9 in	175 mm
Height (C)	7.5 in	190 mm
Weight	62 lbs	28 kgs
0°C MCA (EN)	640	
Terminal (Opt'l)*	A-POLE	
Cell(s)	6	
Electrolyte	Gel	
Terminal Torque Nm	n/a	

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

Features:

Carbon Nano Tube - Ultra energy efficiency due to low resistance

Solid Silica Gel Electrolyte (25% more Electrolyte)

Up to 2 x Faster charging – allows for opportunity charging

PSOC operation – between 40% - 90% SOC

High Specification Materials

Maintenance Free – no topping up required

98% Manufactured Material is recycled

Robust Construction – Vibration resistant

Cycle Life - up to 1500 cycles (EQM) & up to 2000 cycles (LFT)

Design life 12-15 years

High Starting Power

Applications:

Ocean & offshore:

River

Inland waterways

Electric Propulsion

RV

Motorhome & Caravan

All off grid applications:

Utility vehicle

Vehicle conversions

Ambulances & blue light

Solar & renewable energy storage systems

CCTV

Lighting

Traffic Management

Mobility

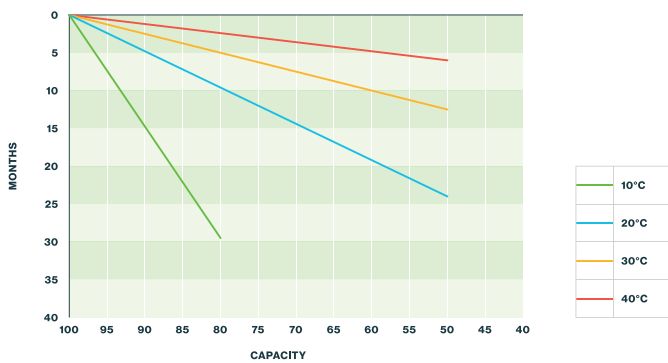
Charging profile

IU Charging I = min. 12% C₅ max. 30% C₅
U = 2.4 V per cell

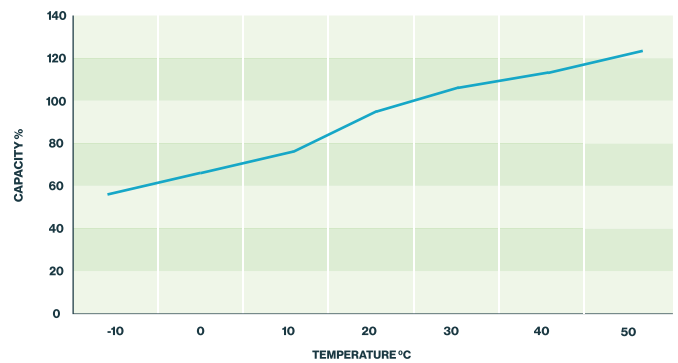
IUI Charging I₁ = min. 12% C₅ max. 40% C₅
U = 2.35 V per cell
I₂ = 1.5% C₅ for max. 4 hours

Select either AGM or GEL setting (GEL setting does increase lifespan)

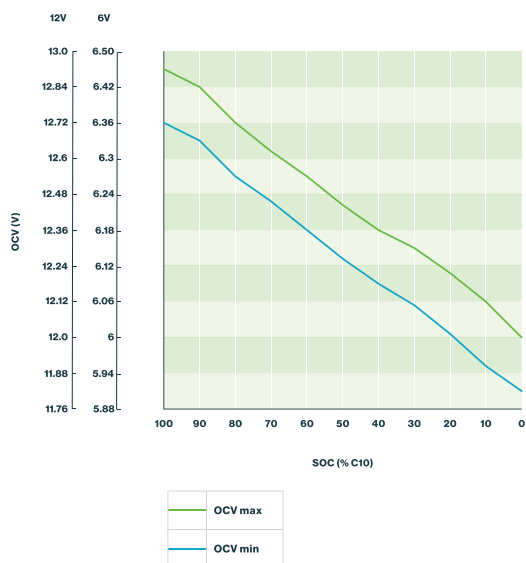
Self discharge at different temperatures



Capacity vs. temperature



Storage: Determine the state of charge



Relation between charging, voltage and temperature

