Why Redflow **zinc-bromine flow battery** technology?

**COMPETITIVE CAPEX**
100% of the capacity is usable over lifetime, with no capacity fading therefore no oversizing required

**BEST IN CLASS LCOS**
Warranted electrode stack lifetime 36,500 kWh energy delivered or 10 years (whichever comes first)\(^3\)

**UNLIMITED SHELF LIFE**
Sustains regular outages without battery damage and can be suspended, stored or hibernated from 0% to 100% state of charge

**RECYCLE OR REPURPOSE**
For all Redflow battery components and electrolyte

**CONSTANT POWER**
Charge 100% of the capacity with constant power, due to a flat voltage curve and simple one stage charge profile

**COMPACT AND HIGH ENERGY DENSITY**
0.34m\(^2\) (3.7ft\(^2\)) with warranted electrode stack throughput of 36,500kWh

**GREATER SAFETY**
Fire retardant electrolyte, no thermal runaway due to separated tank and stack

**NO ACTIVE COOLING REQUIRED**
Lifetime, safety and performance are not affected by temperature

**INTUITIVE WEB BASED MANAGEMENT SYSTEM**
24/7 remote self-monitoring with real-time data capture accessed via the web, through the MODBUS communications system

---

Designed, developed and dedicated R&D in Australia by **REDFLOW**

ZBM2 manufactured in Thailand

Installed by Redflow’s global network of accredited installation partners find out more via [www.redflow.com/system-integrators](http://www.redflow.com/system-integrators)
ZBM2 Technical Specifications

**VOLTAGE:** 48 Volt DC nominal batteries (typical operating range 40-60V)

**CAPACITY:** Maximum 10kWh energy output per daily cycle. No reserved battery capacity requirement – full 10kWh cycle depth available

**DIMENSIONS:** 845L x 823H x 400W (mm); 33L x 32H x 16W (in)

**WEIGHT:** 240kg (530 lb) with electrolyte; 90kg (198 lb) without electrolyte

**ELECTROLYTE VOLUME:** 100L (26Gal)

**NET ENERGY EFFICIENCY:** 80% DC-DC Max

**OPERATING ELECTROLYTE TEMPERATURE RANGE:** 15°C to 50°C (59°F to 122°F), ZBM2 can typically operate at ambient temperatures outside this range for extended periods

**COMMUNICATION:** MODBUS-TCP, CANBUS

**POWER RATING:**
- 3kW (5kW peak)
- 3kW continuous: current up to 75A (40V disconnection point)\(^1\)
- 5kW duration depending on the State of Charge (SOC): current up to 125A (40V disconnection point)\(^1,2\)

**REGULATORY COMPLIANCE MARKS:**

**WARRANTY:**
- Electrode stack: 36, 500 kWh of energy delivered or 10 years (whichever comes first)\(^3\)

---

\(^1\) Values reported for ZBM2 at 100% state of health (SOH) and room temperature

\(^2\) Redflow internal testing shows a 5kW supply for approximately 45 minutes before disconnection, for a ZBM2 starting at 100% state of charge (SOC)

\(^3\) See full warranty document for details, T’s and C’s apply