Why Redflow zinc-bromide flow battery technology in large scale storage?

**PLUG AND PLAY DC SOLUTION**
Packaged plug and play DC solution

The LSB can be interfaced with a large number of commercially available inverters for a wide range of AC applications

**LARGE AND SCALABLE ENERGY CAPACITY**
Total weight of 22.5 tonnes in a 20ft high cube shipping container

Up to 600kWh energy storage, peak power 300kW, continuous power 240kW

Parallel multiple containers when large energy storage is required

**FLEXIBLE VOLTAGE**
A nominal bus voltage of 400V - 800V

**COMPETITIVE CAPEX**
100% of the capacity is usable over lifetime, with no capacity fading therefore oversizing is not required

**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

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

Fire suppression system and safety abuse testing is unnecessary

**INTUITIVE WEB BASED MANAGEMENT SYSTEM**
24/7 remote self-monitoring with real-time data capture accessed via the web, through the MODBUS communications system for each ZBM and the entire energy storage system
LSB Discharge Power
Discharge power based on 60 x ZBM3

Maximum Discharge Power (kW) vs LSB Voltage (V)

Discharge Power (kW)

Time (hours)

The rest of the energy is available at a lower discharge rate.

**LSB Technical Specifications**

**POWER**

20ft: 22.5t up to 300kW (discharge peak)

**LSB CAPACITY**

20ft: 22.5t up to 600kWh

**ZBM CAPACITY**

Maximum 10kWh output per daily cycle
No reserve battery capacity is required, as the full 10kWh cycle depth is available

**DIMENSIONS**

High cube 20ft shipping container

**WEIGHT**

20ft: 22.5t

**DC OPERATING RANGE**

600V– 800V full power
400V - 600V power de-rated

**INTERNAL ELECTROLYTE TEMPERATURE (ZBM)**

15°C to 50 °C (59°F to 122°F)

**AMBIENT OPERATING TEMPERATURE (INSIDE CONTAINER)**

5°C to 50 °C

**COMMUNICATION**

Modbus RTU (RS485), Modbus TCP/IP

**SAFETY DATA SHEET**

DG Class 8 for electrolyte

**SYSTEM MANUFACTURED BY**

flex North America