

Containerised Commercial BESS

Product overview

RedEarth's **scalable, containerised, plug 'n' play systems** are designed to overcome the biggest challenges in commercial energy today — from fringe-of-grid reliability issues and off-grid demands, to network constraints that limit expansion, these modular solutions unlock new opportunities for your business.

Our **fully-integrated hardware and software** solutions give you the flexibility to tackle projects of any scale; all backed by Australian engineering and local support.



Custom built in Australia.
Engineered for the Australian
climate, grid, and conditions



RedEarth's Hardware Advantage

- **Modular design**
Available in 10ft, 20ft, and 40ft containerised formats for fast deployment
- **Scalable capacity**
From 300kWh to 2.5MWh, expandable for future growth
- **Flexible configuration**
On-grid, off-grid, or hybrid programmable systems
- **Generator-ready**
Diesel-battery hybrid integration for maximum uptime
- **Smart control**
Powered by RedEarth's EMS and EPP software, enabling seamless energy trading and optimisation



Scope of Supply

Fully integrated, engineered BESS delivered ready for installation:

- Insulated 10ft, 20ft, 40ft container enclosure
- Integrated HVAC system (temperature controlled)
- Compliant fire suppression system
- Power Conversion System (PCS)
- Battery
- AC distribution board
- DC termination board
- Internal cabling and protection systems
- Integrated EMS for control, monitoring, and optimisation
- Fully factory wired, configured, and tested

Standards & Compliance

- Designed and built in Australia
- Compliant with AS/NZS 4777, AS 3000 (where applicable)
- BESS engineering package included:
 - System architecture
 - Single Line Diagrams (SLDs)

Testing & Warranty

- Factory Acceptance Testing (FAT) completed prior to dispatch
- Site Acceptance Testing (SAT) support included
- 10-year battery warranty
- Australian Customer service

Energy Management System (EMS)

Core Functions:

- Load management and peak shaving
- Generator coordination
- Automatic Transfer Switch (ATS) control

Telemetry:

- Load / PV generation
- Battery (SOC, voltage, current)
- Generator (power, voltage, current)
- Temperature / HVAC status

Control:

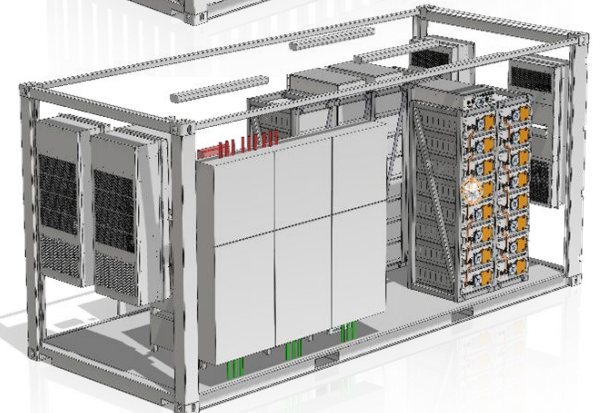
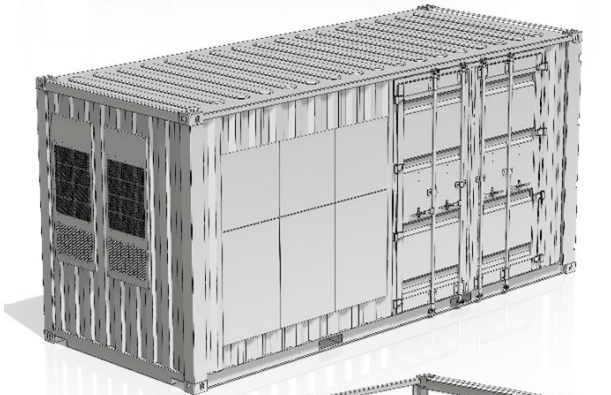
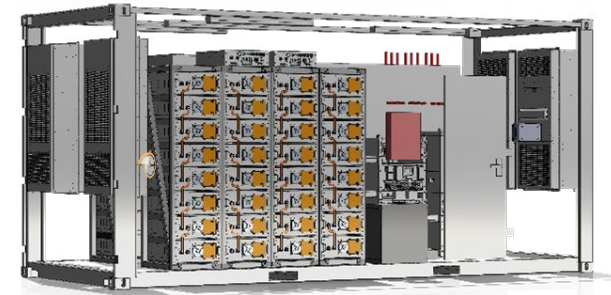
- Battery charge/discharge optimisation
- Generator start/stop
- ATS operation

Customisation:

- Rules-based control logic configurable to site
- Additional programming available (site-specific, at cost)

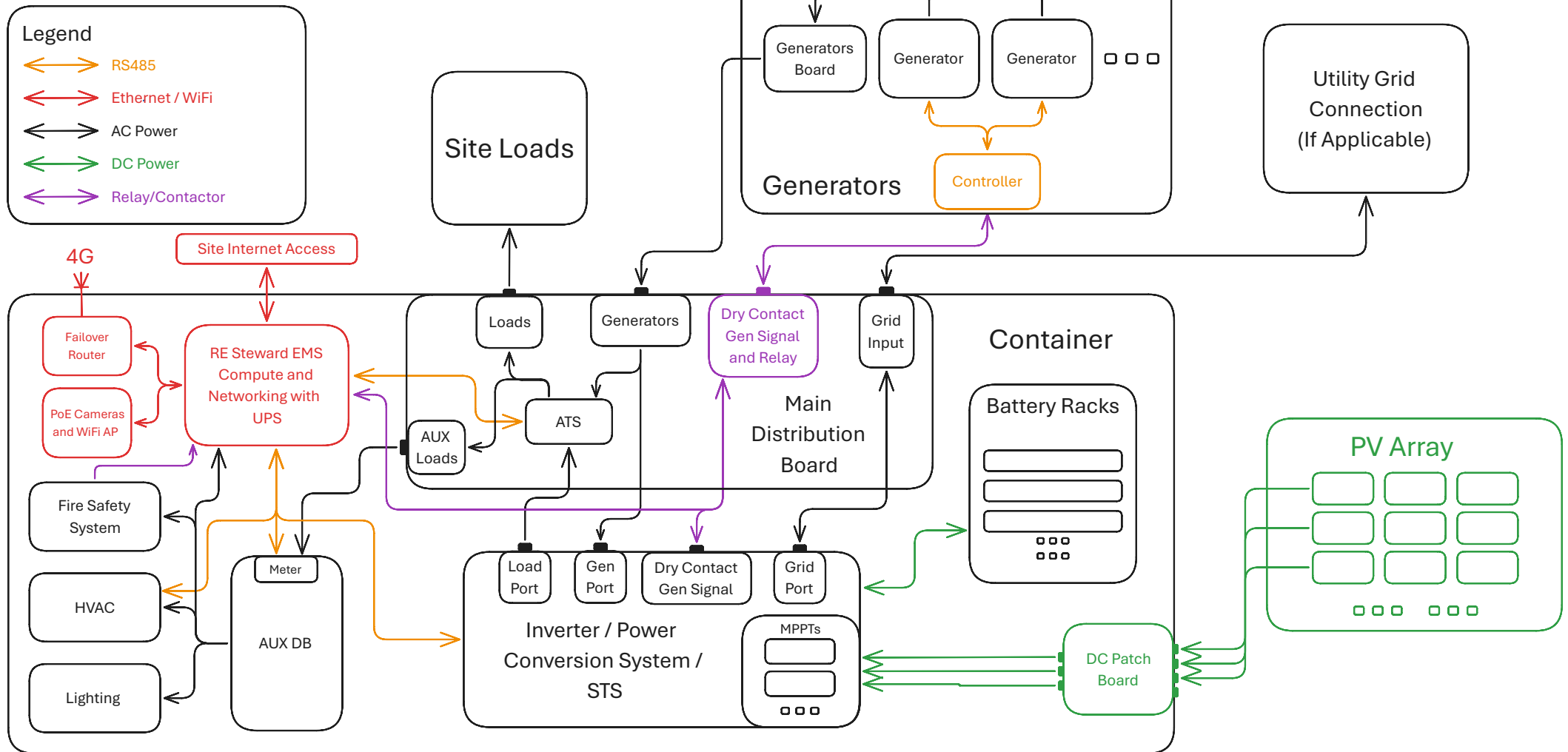
Cyber Security

- Industry-standard encryption protocols
- Data stored in Australian data centres
- Encryption in transit and at rest
- Full RedEarth ownership and control of system data



Custom commercial container example

Sample BESS - System Architecture



**Engineered for scale. Designed for Australia.
Delivering power where it's needed most.**

Byford Custom Container Build

Grid constraints? No worries.

Commissioned in November 2025, RedEarth's **300kW / 737kWh commercial BESS (expandable to 1.1MWh)** enabled a 200-home development to be powered off-grid, *years ahead of grid availability*.

The challenge

The lifestyle home development faced a significant delay, with grid connection unavailable until 2027. This threatened project timelines, delayed home availability, impacted revenue, and risked leaving critical infrastructure without reliable power.

The Solution

RedEarth delivered a scalable, hybrid, off-grid energy system integrating battery storage, distributed solar PV, and backup generation. This provided immediate, reliable power to bring homes online sooner, unlock earlier revenue, and allows for seamless transition to grid connection when it becomes available.



Need support? No worries.

RedEarth is with you all the way, from technical support during installation, to ongoing monitoring and guidance for your system for years to come. Our team is on call to make **powering yourself** as easy as possible.

Power yourself.

www.redearth.energy

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