

Installation is a breeze.



Redback's easy to install home battery solutions - the smartest way to get the job done.



Designed in Australia for
Australian conditions



All-in-one streamlined design



Local, Brisbane based support



AC Coupled single-phase
systems, DC coupled single
and three-phase systems



No part heavier than 32kg



Indoor/outdoor installations

We've done the hard work so you don't have to

Smarter designs for faster, safer and easier installations



Home battery solutions for every customer

Redback Technologies offers a home battery storage solution for every household whether your customer's are looking for a new single or three-phase installation, or they wish to add battery storage to an existing solar system.



Battery Storage Sizing Options

At Redback Technologies, we understand that one size does not fit all.

That's why our home battery solutions come in different sizes so you can choose what will best suit your customers.



Easy Install

Our range of home battery solutions make installation easy thanks to their modular, all-in-one design.

Systems also come pre-wired and are factory tested to ensure a quick installation.



Install with Confidence

Redback's systems are designed in Australia to suit the harsh Australian climate so you can feel confident installing them in an outdoor location or in a garage.

Designed with our installers in mind, each system is made with high-quality materials with no component weighing over 32kg.



Uninterruptible Power Supply

Even when the grid goes down, your customers' lights and essential appliances will stay on*. Switching over in just 10 milliseconds, your customers won't even notice a power outage.

* When backup circuit is connected and battery energy is available. Rate as EPS where regulations require.



Fast and Simple Commissioning

Redback's intuitive installer app helps make the commissioning process fast and simple, allowing you to keep install costs down while still providing the best in class solutions for your customers.



To find out more about Redback's Smart Home Battery Systems visit us at redbacktech.com

Empowering you through data-driven technology

RedbackINSTALL

No matter what product in the Redback range you are installing, the RedbackINSTALL app's simple step-by-step guide will walk you through the commissioning process and give you the ability to track your progress. With live data updated every 5 seconds, you will be able to test configurations and complete your installation quickly and efficiently.*

* Requires a Redback Portal Installer Login



Redback Portal

The Redback portal provides you and your customers with an intuitive dashboard that incorporates real time and analytical data that can be stored for up to two years.*

* Data will only be recorded and displayed if system is continuously connected to the Redback cloud via internet. Data is not stored on the device itself.

Redback Partner Fleet Manager

You can actively monitor and manage your fleet of Redback Smart Storage Systems from one convenient location with the Redback Partner Fleet Manager. Here you can view your installations in a map or list format and apply filters to easily find customers.*

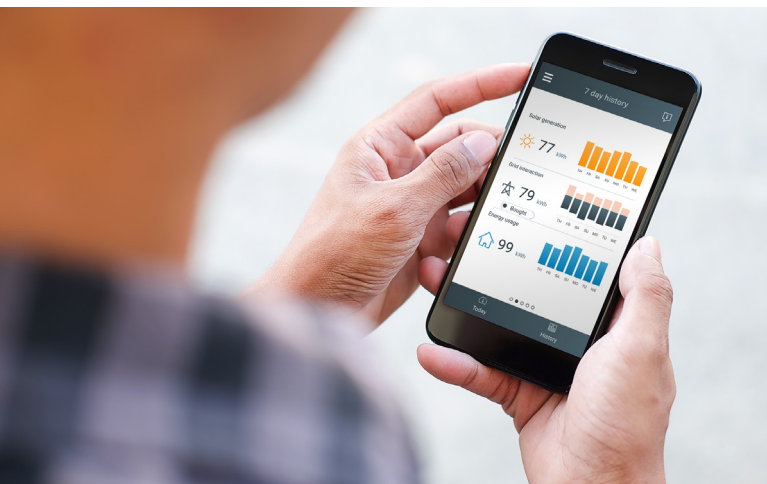
* Available for large fleets. Contact us for more information.



MYRedback

The MYRedback app allows your customers to monitor their systems both at home and on the go. Incorporating real time and historical data, they can have peace of mind knowing they have full visibility of their solar, battery and home. Customers can view their solar and battery at any time with the app's intuitive and easy to use design.*

* Data will be displayed if system is continuously connected to the Redback cloud via internet.



Grow your business with Redback Partner Connect

The Redback Partner Connect program aims to build a long-term relationship with your business. We will support and assist you to grow your solar and battery storage sales through unique benefits including:

- Approved installer partner logo
- Free product, installation and sales installation training*
- Exclusive online access to marketing collateral, brochures, imagery and much more
- A tiered incentive and co-marketing fund program that grows with your sales
- Priority support for our platinum partners
- Access to other Redback-specific third party offerings**

Find out how you can join the Redback team at redbacktech.com/installers



Why Redback?

Redback Technologies is a local Australian company with systems specifically designed to meet the harsh Australian climate.

We design our systems with our installers in mind and make them easy to lift and install. Redback Technologies also provides local support, in depth training on all our systems, and local points of contact for each state.

* Terms and Conditions Apply.

** If available and applicable.

Smart Hybrid Systems

Intelligent System

Our unique software ensures the best use of your energy by controlling the inverters response, optimising the battery and directly controlling loads.

Easy Installation

Our pre-wired balance of system and plug and play battery enclosure allows for fast and low-cost installation, including approved DC isolator.

Uninterruptible Power Supply

Experience near instantaneous and automatic back up to selected circuits* when the mains power fails.

* When backup circuit is connected and battery energy is available. Rate as EPS where regulations require.

Indoor/Outdoor Rated

Our systems are IP65 rated and designed for Australian conditions.

Smart Monitoring

Our easy to use portal and apps allow monitoring of PV generation, battery charge levels & household consumption from one convenient location.



Smart Hybrid System SH5000 & BE14000

Smart Three Phase System ST10000 & BE14000-HV

SOLAR ARRAY

Number of MPPT inputs	2	2
Strings per MPPT input	1/1	1/2
Maximum Recommended PV	6.6kW	13kW
Maximum DC open circuit voltage	580V DC	600V DC
MPPT operating range	125 – 550V	200 – 550V
Starting voltage	125V DC	180V DC
Maximum DC input current (for each solar array input)	11A DC	12.5/22A
Maximum short current (for each solar array input)	13.8/13.8A	15.2/27.6A
Solar array switch rating	1000V DC	1100V DC
Input connectors	MC4	MC4
Residual current and insulation monitoring		Integrated

UTILITY INTERFACE

Nominal AC voltage/frequency	230V AC, 50Hz	400V, 50Hz
Continuous AC power rating	5kVA AC	10kVA AC (derate over 45°C ambient)
Maximum AC power to utility grid	5kVA AC (derated over 45°C ambient)	11kVA AC (derate over 45°C ambient)
Maximum AC current to utility grid	21.7A AC	16.5A
Maximum AC current from utility grid	40A AC	22.7A
Nominal AC output range	230/240V 50Hz	400V AC 50Hz
Current THD	Less than 1.5%	Less than 3%
Power factor		0.8 leading to 0.8 lagging (adjustable)
AC overvoltage category		Category III
Anti-islanding and AC overcurrent protection		Integrated
Inverter topology		Transformerless (with HF transformer isolation for battery)

BATTERY INTERFACE

Nominal DC voltage	48V DC	180-600V DC
Battery compatibility	PylonTech US2000 & US3000	PylonTech H48050 or H48074
Maximum charging and discharge power (from battery)	4.6kW DC*	10kW DC*
Maximum charging current	85A DC	25A DC
Maximum discharging current	100A DC	25A DC
Battery charging method		Self-adaption to BMS
Battery disconnect	Integrated 2 pole DC breaker 125A DC per pole	2 pole DC isolator 32A DC per pole

CONTROL INTERFACE

Signal relay outputs	4	3
DRM modes	0-8	0
Remote firmware updates		Supported
Relays	2 x 10A Omron	Optional

BACK UP LOADS OUTPUT

Nominal AC voltage/frequency	230V AC, 50Hz, L/N/PE	400V AC, 50Hz, 3L/N/PE
Continuous AC power rating	4.6kVA AC (derate over 45°C ambient)	10kVA AC (derate over 45°C ambient)
Maximum AC power rating	9.6kVA AC (10 seconds maximum)	16.5kVA AC (60 seconds maximum)
Maximum AC current	21.7A	16.5A
Voltage THD	Less than 4.5% (with linear loads)	Less than 3.0%
Back-up loads AC disconnect / isolator	25A MCB	25A MCB
Manual back-up load AC bypass switch		Integrated

*Dependant on number of batteries installed

Smart Hybrid System SH5000 & BE14000

Smart Three Phase System ST10000 & BE14000-HV

EFFICIENCY

Maximum efficiency (to utility grid)		97.60%
European averaged efficiency	97.00%	96.80%
Maximum power point tracking efficiency		99.90%
Efficiency (powering loads from battery)	90% typical	97.5% typical
Standby losses		Less than 8W AC

BATTERY ENCLOSURE

Compatible Smart Hybrid System	SH5000	ST10000
Number of battery units	2-4 battery modules	4 battery modules
Storage capacity	Standard: 4.8-14.2kWh Expanded: 19.2-28.4kWh	Standard: 9.6 / 14.2kWh Expanded: 19.2 / 28.4kWh
Battery voltage	48V DC nominal	192V DC nominal / 384V DC expanded
Battery chemistry		Lithium-ion Phosphate
Access type		Removable front panels

CABLE SPECIFICATION

Battery cable rating	4 x 65A	25A
Battery cable type		8 AWG (8.36mm ²)
Battery cable termination (battery enclosure)		Surlok Amphenol connector
Battery cable termination (inverter)		Surlok Amphenol connector
BMS cable type		Supplied

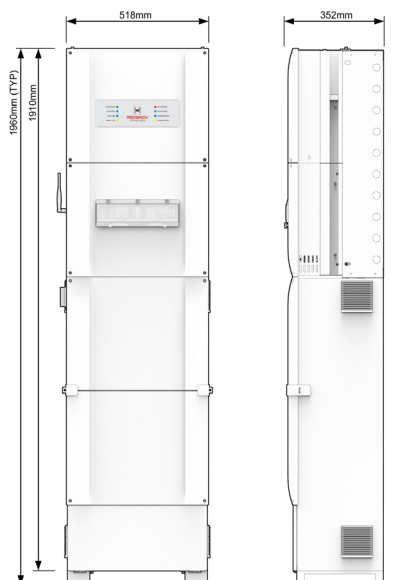
VENTILATION SPECIFICATION

Ventilation type		Passive and active cooling
Ventilation control		Smart temperature control
Number of fans		2
Fan power	48V DC / 0.04A per fan	12V DC / 0.13A per fan
Fan activation temperature		Variable depending on charge/discharge
Incoming ventilation aperture		72cm ² with washable filter
Outgoing ventilation aperture		72cm ² with washable filter
Passive airflow rate		30cm ³ /min
Active airflow rate		320cm ³ /min

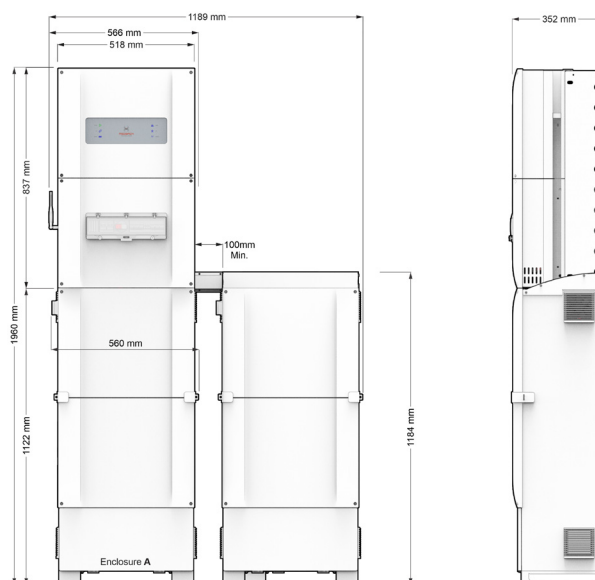
GENERAL DATA

Dimensions (W x H x D)		
Mounting and weight	79kg (Installed, excluding batteries) 175kg (Installed, with 4x US2000) 207kg (Installed, with 4x US3000)	77kg (Installed, excluding batteries) 173kg (Installed, with 4x H48050) 205kg (Installed, with 4x H48074)
Ambient temperature range - Inverter & BoS	-25°C to 60°C Batteries derate below 10°C and over 40°C	-35°C to 60°C Batteries derate below 10°C and over 40°C
Ambient temperature range - Battery Enclosure		Based on battery specification
Relative humidity		0 to 95%
DC overcurrent category		Category II
Moisture location category		4K4H
Environmental protection rating - Hybrid Inverter & BOS	IP65	IP66
Environmental protection rating - Battery Enclosure		IP54
Operating Altitude		<4000m
Inverter Cooling		Natural convection
Battery Enclosure Cooling		Active Cooling
Noise emissions	Less than 25dB	Less than 30dB
Warranty		10 Years
Construction		Battery Cabinet: Steel Chassis Inverter, BoS and Covers: Aluminum
Finish		Sealed and powder coated
Supply		Ships pre-assembled (excluding batteries)
Maintenance		Externally serviceable dust filters
USER INTERFACE		
Front panel display		Coded, coloured LEDs
Communications		Bluetooth for onboarding, Wi-Fi or Ethernet for phone and web monitoring
Smartphone App		Android 7 or higher; IOS 12.0 or higher
Portal		Web based; platform independent
Power/energy monitoring		Includes 1 x utility grade meter (class 1)

Smart Hybrid System
SH5000 & BE14000



Smart Three Phase System
ST10000 & BE-14000-HV



Smart Battery System

Upgrade your PV System & Save

Get the most from your self-generated energy. Store your excess energy for use at night.

Uninterruptible Power Supply*

Experience near instantaneous back-up with your UPS functionality.

* When backup circuit is connected and battery energy is available. Rate as EPS where regulations require.

Pre-wired for Quick Install

Bringing the unique Redback pre-wired design to an AC coupled battery to ensure ease of install.

Indoor/Outdoor Rated

Our systems are IP54 rated and designed for Australian conditions.



SB7200

UTILITY INTERFACE

Utility Grid Max. Export Power	3300W
Utility Grid Max. Export Current	14.3A
Utility Grid Max. Input Apparent Power	7000VA
Utility Grid Max. Input Current	30.4A
Utility Grid Nominal Output Voltage	230V
Utility Grid Nominal Output Frequency	50Hz
Utility Grid Power Factor	1.0 (unity)
Utility Grid Power Factor	0.8 lagging to 0.8 leading
Utility Grid Inverter Isolation	Non-isolated

BACKUP LOADS OUTPUT

Backup Continuous AC Output Power	3300W
Backup Max. AC Output Power	3300VA
Backup Max. AC Output Current	14.3A
Backup AC Output Voltage THD	< 3%
Backup/Battery Isolation AC Output	Non-isolated

BATTERY INTERFACE

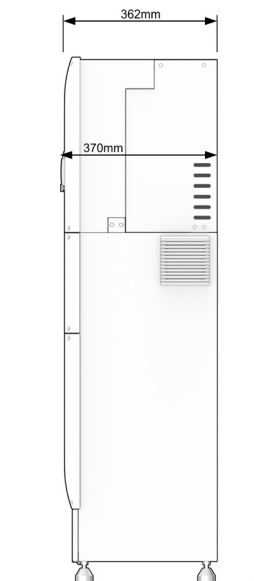
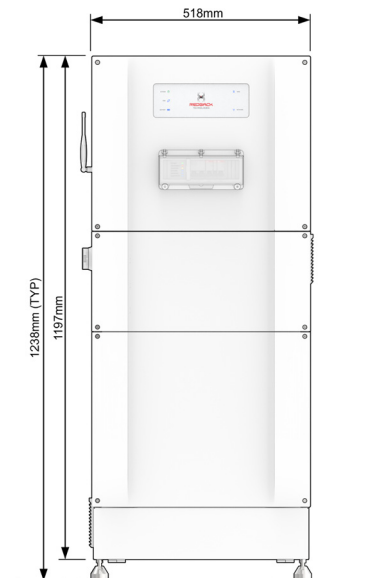
Battery Type	Li-Ion
Battery Charging Method	BMS Controlled
Battery Voltage Range	85 to 460V
Battery Max. Charging Power	3600W
Battery Max. Charging Current	25A
Battery Max. Discharging Power	3300W
Battery Max. Discharging Current	25A

GENERAL DATA

Dimensions (w x h x d)	556 x 1238 x 370 mm
Installed Weight	130kg
Noise Emissions	Less than 30dB
Standby Losses	Less than 8W AC
Operating Temperature Range	-20°C to 60°C Derates below 10°C and above 40°C
Allowable Relative Humidity	0 - 100%
Protective Class	Class I
Environmental Protection Rating	IP54
Operation Altitude	0 - 4000m
AC Overvoltage Category	Category III
DC Overvoltage Category	Category II
Moisture Location Category	4K4H
External Environment Pollution Degree	Grade 1, 2 and 3
Grid Connection Standard	AS 4777.2:2015
Safety Regulation	IEC/EN 62477-1, AS 62040.1.1
Compatible Batteries	PylonTech H48050 (2.4kWh)
Battery Controller	RB600-AC

USER INTERFACE

Front Panel Display	Coded, coloured LEDs
Communications	Bluetooth for onboarding, Wi-Fi or Ethernet for phone and web monitoring
Smartphone App	Android 7 or higher; iOS 12.0 or higher
Portal	Web based; platform independent
Power/Energy Monitoring	Includes 1 x utility grade meter (class 1)



CERTIFICATIONS

AS3000:2018	IEC 62109-1:1.0:2010	RCM
AS/NZS 4777.2:2015	IEC 62109-2:1.0:2011	CE Mark (LVD, EMC, RoHS Directives)
AS/NZS 5033:2014 Amd. 1 & Amd. 2	IEC 62040-1:2.0:2017	-
AS/NZS 5139:2019	IEC 62116:2.0	-

APPROVALS