

## Powering Australian **Homes Since 2015**

A Redback for every

**Aussie home** 

#### **I-Series**

Single and three-phase grid-tie inverters.

Install a PV system now, with the option to upgrade to battery storage in the future.





#### **H-Series**

Single and three-phase hybrid battery systems, with options for every home.

Install PV & storage together, or add a battery to an existing system.

# Smarter designs for faster, safer and easier installations



Easy install



Inverter & battery sizing options



Marketing-leading VPP functionality



**Designed for Aussie conditions** 



**Evolving technology** 



Fast and simple commissioning

# The Redback I-Series

Affordable yet robust grid-tie inverters, built to survive in harsh Australian outdoor conditions. In-built Smart Load Control allows relay functionality for a single load. Start with a solar system now, and add a Redback battery in the future.





Single & 3-phase options



Indoor or outdoor installation



Smart meter & Wi-Fi dongle included



10-year Australianbacked warranty



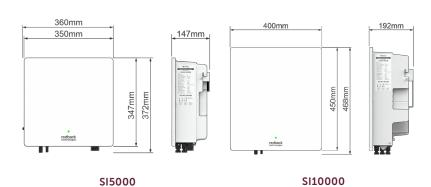
Smart Load Control



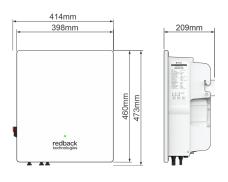
Easy monitoring app and portal

#### Smart Inverter & 3-Phase Smart Inverter

**Smart Inverter** 



**Smart Inverter** 



RED-I3-T10 & RED-I3-T15 3-Phase Smart Inverter

	SI5000	SI10000	
PV Port			
Maximum PV Input Power <sup>1</sup>	7,500Wp	15,000Wp	
Number of MPPTs	2	2	
Strings per MPPT Input	1/1	1/2	
MPPT Operating Voltage (range)	DC 70 -	- 540V	
Start-up Voltage	DC 9	90V	
Maximum Input Voltage (Vmax)	DC 5	50V	
Maximum Current (Imp)	DC 13.5/13.5A	DC 13.5/27A	
Short Circuit Current (Isc)	DC 20/20A	DCX 20/40A	
Grid Interactive Port	B0 20/20A	BOX 20/40A	
Max. Output Apparent Power	5,000VA	10.000VA	
Nominal Output Voltage	AC 2		
	50I		
Nominal Output Frequency			
Max. Output Current	AC 25.00A	AC 45.50A	
Power Factor (range)	0.8 lagging to		
Output Voltage THD	<3	%	
General Information		1000	
Operating Temperature	-25°C t		
Operating Temperature Derated Output	below 10°C ar		
Operating Relative Humidity	0-100%		
Operating Altitude	4000m		
Protective Class	1		
Ingress Protection Rating	IP65 (outdoors)		
AC Overvoltage Category	OVCIII		
DC Overvoltage Category	OVCII		
Active Anti-islanding Method	Active Frequency Shifting		
Inverter Topology	Non-Is		
Country of Origin	Chi		
Demand Response Modes	DRN		
Standby Self-Consumption Noise Emissions	<6		
Weight	8.5kg	16kg	
Material Finish	Alumi		
	Sealed and powder coated  10 Years		
Warranty Efficiency	10 16	edis	
	97.3%	97.50%	
Maximum Efficiency European Efficiency	96.5%	96.80%	
PV Port Isolator	70.5%	90.00%	
Utilisation Category	DC-PV2		
Load Control	50	, <u>, , , , , , , , , , , , , , , , , , </u>	
Relays	Redback Smart Load Control	using Direct IO: on kWh meter	
User Interface			
Front Panel Display	Coded, cold		
Communications	Bluetooth for commissioning, Wi-Fi or ethernet for remote access		
Remote Access	Redback Portal or	MyRedback app	
Remote Firmware Updates	Supported		
Power/Energy Monitoring	Includes 1 x utility grade energy meter (class 1)		
Product Compliance	molades 1x dulity grade	strongy motor (class i)	
Product Compliance	AS/NZS 4777.2:2020 • IEC 62116:2014 • IEC 60529 • RCM • IEC 62109-1:2010 • EN 61000 • RCM (LVD, EMC, RoHS directives) • IEC 62109-2:2011		
Certifications and Approvals			

	RED-I3-T10	RED-I3-T15		
PV Port				
Maximum PV Input Power <sup>1</sup>	15,000Wp	22,500Wp		
Number of MPPTs	2			
Strings per MPPT Input	1/2	2/2		
MPPT Operating Voltage (range)	DC 160 - 1	000V		
Start-up Voltage	DC 180V			
Maximum Input Voltage (Vmax)	DC 110	OV		
Maximum Current (Imp)	DC 15/30A	DC 30/30A		
Short Circuit Current (Isc)	DC 20/40A	DC 40/40A		
Grid Interactive Port	20 20, 10,1	50 10/10/1		
Max. Output Apparent Power	9,999VA	16,500VA		
Nominal Output Voltage	AC 380/40			
Nominal Output Frequency	50Hz / 6			
Max. Output Current	AC 14.50A	AC 23.91A		
Power Factor (range)	0.8 lagging to 0	J.8 leading		
Output Voltage THD	<3%			
General Information				
Operating Temperature	-25°C to			
Operating Temperature Derated Output	below 10°C and			
Operating Relative Humidity	0-100%			
Operating Altitude	4000m			
Protective Class				
Ingress Protection Rating	IP66 (Outo			
AC Overvoltage Category	OVCIII			
DC Overvoltage Category	OVCII			
Active Anti-islanding Method	Active Frequency Shifting			
Inverter Topology	Non-Isolated			
Country of Origin	China			
Demand Response Modes	DRM			
Standby Self-Consumption	<1W (at night), <10 <30 dE			
Noise Emissions				
Weight	18.7kg	20.1kg		
Material	Alumini			
Finish	Sealed and pow			
Warranty	10 Yea	rs		
Efficiency Maximum Efficiency	98.00%	98.00%		
European Efficiency	97.20%	97.40%		
PV Port Isolator	97.20%	97.40%		
Utilisation Category	DC-P\	12		
Load Control	DC 1 (	<u> </u>		
Relays	Redback Smart Load Control us	ing Direct IO: on kWh meter		
User Interface	Redback Smart Load Control ds	ing birectio, on kwirmeter		
Front Panel Display	Coded colour	rod I EDs		
FIGURE Farier Display	Coded, coloured LEDs			
Communications	Bluetooth for commissioning, Wi-Fi or ethernet for remote access			
Remote Access	Redback Portal or N	lyRedback app		
Remote Firmware Updates	Supported			
Power/Energy Monitoring	Includes 1 x utility grade e			
Product Compliance		. 37		
Certifications and Approvals	AS/NZS 4777.2:2020 • IEC 62116:2014 • IEC 60529 • RCM • IEC 62109-1:2010 • EN 61000 • RCM (LVD, EMC, RoHS directives) • IEC 62109-2:2011			
Designed with Installation Standards Considered	AS/NZS 3000:2018 • AS/NZS 5033:2021			

# The Redback H-Series

An all-in-one solution, engineered to be smarter, larger and more robust; with an easier installation experience and fewer return site visits. Redback's H-Series offers AC and DC coupled options for single-phase homes, 3-phase homes, and homes with high energy needs or multi-facing roofs.





Single, 3-Phase and high-voltage options



Backup supply in a power outage



Wi-Fi and 4G compatible



SunSpec compliant



Indoor or outdoor installation



10-year Australianbacked warranty

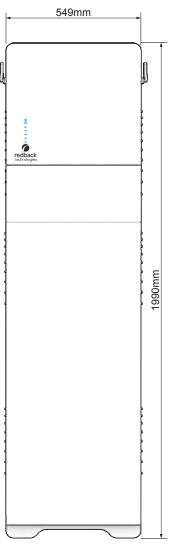


Easy monitoring app and portal

### Hybrid Battery System



	SH5000-G3	SH6000-G3		
PV Port				
Maximum PV Input Power <sup>1</sup>	8000Wp	9600Wp		
Number of MPPTs		2		
Strings per MPPT Input MPPT Operating Voltage (range)		/1 -520V		
Start-up Voltage		90V		
Maximum Input Voltage (Vmax)		500V		
Maximum Current (Imp)		5/16A		
Short Circuit Current (Isc)	DC 24	1/24A		
Grid Interactive Port				
Max. Output Apparent Power	5,000VA	6,000VA		
Nominal Output Voltage		230/240V		
Nominal Output Frequency		Hz		
Max. Output Current Max. Input Current	AC 21.7A AC 32A	AC 26.1A AC 40A		
Power Factor (range)		o 0.8 leading		
Output Voltage THD		5%		
Backup Port				
Nominal Output Voltage	AC 220/2	230/240V		
Nominal Output Frequency		Hz		
Maximum Output Current	AC 21.7A	AC 26.1A		
Rated Apparent Power (on-grid)	AC 5000VA	AC 6000VA		
Rated Apparent Power (off-grid)	AC 5000VA 7000VA (60s max)	AC 6000VA		
Peak Apparent Power Output Voltage THD	1 -	8000VA (60s max)		
Battery Port				
Voltage (nominal)	DC 42	2-58V		
Max. Current (charge)	DC 105A	DC 125A		
Max. Power (charge)	DC 5000W	DC 6000W		
Max. Current (discharge)	DC 105A	DC 125A		
Max. Power (discharge)	DC 5000W	DC 6000W		
Battery Type  Rettery Donth of Discharge	Li- 95	ion		
Battery Depth of Discharge General Information (Inverter)	98	0%		
Operating Temperature	-25°C1	to 60°C		
Operating Temperature Derated Output		and over 45°C		
Operating Relative Humidity		95%		
Operating Altitude	300	00m		
Protective Class		l		
Ingress Protection Rating		utdoors)		
AC Overvoltage Category	OV			
DC Overvoltage Category		CII		
Active Anti-islanding Method Inverter Topology	· ·	ency Shifting		
Country of Origin	Non-isolated China			
Demand Response Modes		M 0		
Standby Self-Consumption	<20W			
Noise Emissions	<35 dBA			
Installed Weight		ikg		
Material		inium		
Finish		owder coated		
Warranty Efficiency	IO Y	ears		
Maximum Efficiency	975	50%		
Maximum Battery to Load Efficiency				
European Efficiency	93.51% 96.20%			
Isolation Devices	70.	2070		
	Utilisation Category / Isolato	or Rated Operational Current		
PV Port Isolator		2 / 55A		
Grid Interactive Port		50A		
Backup Port	C/ 50A			
Battery Port	B/C / 125A			
Load Control				
Relays	Redback Smart Load Control	using Direct IO; on kWh meter		
Battery Enclosure Data				
Enclosure Model		3-BE		
Number of Battery Units		-4		
Storage Capacity		2.2kWh		
Battery System Model Maximum Capacity		US5000		
Nominal Voltage	19.2kWh			
Rated Current	DC 48V DC 120A			
Protective Class	DC 120A			
Ingress Protection Rating	IP54 (outdoors)			
Dimensions (W x D x H)	540 x 363 x 1270mm			
Material	Aluminium			
Finish Lear Interface	Sealed and p	owder coated		
User Interface	Coded call	oured LEDs		
Front Panel Display Communications	Coded, coloured LEDs			
Remote Access	Bluetooth for commissioning, WI-Fi or ethernet for remote access, 4G (optional)			
Remote Firmware Updates	Redback Portal or MyRedback app Supported			
Power/Energy Monitoring Product Compliance	includes 1x utility grad	e energy meter (class 1)		
Product Compliance	AC/N7C 47770,0000 JEO (044,0044 JEO 1000	DOM JEG 40400 4 0040 JEG 40040 40075 TO		
Certification, Standards and Approvals  Designed with Installation Standards Considered	AS/NZS 47772:2020 • IEC 62116:2014 • IEC 60529 • RCM • IEC 62109-1:2010 • IEC 62040-1:2017 • EN 61000 • RCM (LVD, EMC, RoHS directives) • IEC 62109-2:2011 • IEC 62477-1:2012			
Designed with Installation Standards Considered	AS/NZS 3000:2018 • AS/NZS 5139:2019 • AS/NZS 5033:2021			

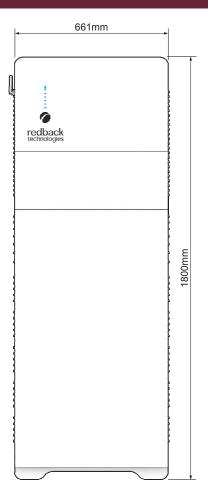


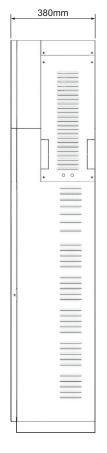


### Hybrid Battery Max



	RED-H3-S05HV	RED-H3-S06HV	RED-H3-S08HV	RED-H3-S10HV
PV Port				
Maximum PV Input Power <sup>1</sup> Number of MPPTs	7,500Wp	9,000Wp	12,000Wp	15,000Wp
Strings per MPPT Input			5 1/1	
MPPT Operating Voltage (range)			-500V	
Start-up Voltage		DC '	100V	
Maximum Input Voltage (Vmax)			500V	
Maximum Current (Imp)			16/16A	
Short Circuit Current (Isc) Grid Interactive Port		DC 19.2/1	19.2/19.2A	
Max. Output Apparent Power	4,999VA	6,600VA	8,800VA	9.999VA
Nominal Output Voltage	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		230/240V	
Nominal Output Frequency		50Hz/	60Hz	
Max. Output Current	AC 25.0A	AC 30.0A	AC 40.0A	AC 45.5A
Max. Input Current	AC 43.5A	AC 52.2A	AC 69.9A	AC 69.9A
Power Factor (range) Output Voltage THD			o 0.8 leading 5%	
Backup Port			376	
Nominal Output Voltage		AC 220/2	230/240V	
Nominal Output Frequency		50Hz/	60Hz	
Maximum Output Current	AC 22.7A	AC 27.3A	AC 36.4A	AC 45.5A
Rated Apparent Power (on-grid)	5,000VA	6,000VA	8,000VA	10,000VA
Rated Apparent Power (off-grid)  Peak Apparent Power	5,000VA	6,000VA 7,200VA (60s max)	AV000,8	10,000VA
Output Voltage THD	6,000VA (60s max)		9,600VA (60s max) 5%	12,000VA (60s max)
Battery Port				
Voltage (nominal)		DC 80	-450V	
Max. Current (charge)			50A	
Max. Power (charge)	DC 5,000W	DC 6,000W	DC 8,000W	DC 10,000W
Max. Current (discharge)  Max. Power (discharge)	DC 5.000W	DC 6.000W	50A DC 8,000W	DC 10,000W
Battery Type	DC 3,000W		ion	DC 10,000W
Battery Depth of Discharge			5%	
General Information (Inverter)				
Operating Temperature	-40°C to 60°C			
Operating Temperature Derated Output			45°C	
Operating Relative Humidity Operating Altitude			-condensing)	
Protective Class		4000111 (>300011	n power derating)	
Ingress Protection Rating		IP66 (0	utdoors)	
AC Overvoltage Category			CIII	
DC Overvoltage Category		0\	'CII	
Active Anti-islanding Method			ency Shifting	
Inverter Topology			solated	
Country of Origin			ina	
Demand Response Modes Standby Self-Consumption			M O	
Noise Emissions			t night) dBA	
Installed Weight			lkg	
Material			inium	
Finish			owder coated	
Warranty		10 Y	ears	
Efficiency Maximum Efficiency		97/	50%	
European Efficiency			00%	
Isolation Devices				
		Utilisation	Category	
PV Port Isolator		DC-	PV2	
Grid Interactive Port	С			
Backup Port	C			
Battery Port		В	/c	
Load Control				
Relays	Red	back Smart Load Control	using Direct IO; on kWh m	neter
Battery Enclosure Data				
Enclosure Model			-BE25HV	
Number of Battery Units Storage Capacity			-5 5kWh	
Battery System Model				
Maximum Capacity	RED-P1-5000HV 25kWh			
Nominal Voltage	DC 140.8-352V			
Rated Current	DC 50A			
Protective Class	1			
Ingress Protection Rating	IP54 (outdoors)			
Dimensions (W x D x H)  Material	652 x 380 x 1150mm Aluminium			
Finish	Sealed and powder coated			
User Interface				
Front Panel Display		Coded, col	oured LEDs	
Communications	Bluetooth for o	commissioning, WI-Fi or e	thernet for remote acces	s, 4G (optional)
Remote Access	Redback Portal or MyRedback app			
Remote Firmware Updates	Supported			
Power/Energy Monitoring	Includes 1 x utility grade energy meter (class 1)			
Product Compliance				
Certification, Standards and Approvals	AS/NZS 4777.2:2020 • IEC 62116:2014 • IEC 60529 • RCM • IEC 62109-1:2010 • IEC 62040-1:2017 • EN 61000 • RCM (LVD, EMC, RoHS directives) • IEC 62109-2:2011 • IEC 62477-1:2012			
Designed with Installation Standards Considered	AS/NZS 3000:2018 • AS/NZS 5033:2021 • AS/NZS 5139:2019			





### Hybrid Battery 3-Phase



	RED-H3-T10HV	RED-H3-T15HV	RED-H3-T20HV	RED-H3-T30HV
PV Port	00.00014	70.0001	40.0001	45.000
Maximum PV Input Power <sup>1</sup>	20,000Wp	30,000Wp	40,000Wp	45,000Wp
Number of MPPTs Strings per MPPT Input		2	/2/2	
MPPT Operating Voltage (range)			30-900V	
Start-up Voltage			180V	
Maximum Input Voltage (Vmax)			1000V	
Maximum Current (Imp)			)/40/40A	
Short Circuit Current (Isc)			)/50/50A	
Grid Interactive Port		BC 30	1/30/30A	
Max. Output Apparent Power	9.999VA	16.500VA	22.000VA	29.999VA
Nominal Output Voltage	7,77740		400 / 415V	27,77748
Nominal Output Frequency			z / 60Hz	
Max. Output Current	AC 14.5A	AC 24.0A	AC 31.9A	AC 43.4A
Max. Input Current	AC 28.3A	AC 28.3A	AC 37.7A	AC 56.6A
Power Factor (range)	A0 20.0A		to 0.8 leading	A0 00.0A
Output Voltage THD			<3%	
Backup Port				
Nominal Output Voltage		AC 380	/400/415V	
Nominal Output Frequency			z/ 60Hz	
Maximum Output Current	AC 14.5A	AC 21.8A	AC 29A	AC 43.5A
Rated Apparent Power (on-grid)	9,999VA	15,000VA	20.000VA	29.999VA
Rated Apparent Power (off-grid)	10.000VA	15,000VA	20,000VA	30,000VA
Peak Apparent Power	15,000V (3s max)	22,500VA (3s max)	30,00VA (3s max)	45,000VA (3s max)
Output Voltage THD	(25 many		<3%	,(30 man)
Battery Port				
Number of Independent Battery Inputs			2	
Voltage (nominal)		DC 18	30-800V	
Max. Current (charge)			C 50A	
Max. Power (charge)	DC 10,000W	DC 15.000W	DC 20.000W	DC 30,000W
Max. Current (discharge)			C 50A	
Max. Power (discharge)	DC 10,300W	DC 15,300W	DC 20,300W	DC 30.300W
Battery Type	20 10,00011		i-ion	20 00,00011
Battery Depth of Discharge			95%	
General Information (Inverter)				
Operating Temperature		-40°C	C to 60°C	
Operating Temperature Derated Output		-40°C to 60°C Over 45°C		
Operating Relative Humidity			n-condensing)	
Operating Altitude			m power derating)	
Protective Class			1	
Ingress Protection Rating		IP66 (0	Outdoors)	
AC Overvoltage Category		0	VCIII	
DC Overvoltage Category		C	IVCII	
Active Anti-islanding Method			uency Shifting	
Inverter Topology			isolated	
Country of Origin		С	hina	
Demand Response Modes		DI	RM 0	
Standby Self-Consumption		<10W	(at night)	
Noise Emissions			dBA*	
Installed Weight			55kg	
Material			minium	
Finish		Sealed and	powder coated	
Warranty		10	Years	
Efficiency				
Maximum Efficiency		97	7.60%	
European Efficiency		97	7.00%	
Isolation Devices				
		Utilisatio	on Category	
PV Port Isolator	Utilisation Category DC-PV2			
Grid Interactive Port		БС		
		C		
Backup Port			C	
Battery Port			B/C	
Load Control				
Relays	Re	dback Smart Load Contro	ıl using Direct IO; on kWh ı	meter
Battery Enclosure Data				
Enclosure Model		RED-H	3-BE25HV	
Number of Battery Units	3-10 (seco	ndary battery enclosure r	needed if 6 or more batter	y units used)
Storage Capacity			50kWh	
Battery System Model		RED-P	1-5000HV	
Maximum Capacity		50 kWh (25kWh p	er battery enclosure)	
Nominal Voltage	DC 211.2 - 704V			
Rated Current	DC 50A			
Protective Class	l l			
Ingress Protection Rating	IP54 (outdoor)			
Dimensions (W x D x H)	652 x 380 x 1150mm			
Material	Aluminium			
Finish	Sealed and powder coated			
User Interface				
Front Panel Display		Coded, co	oloured LEDs	
Communications	Bluetooth for commissioning, WI-Fi or ethernet for remote access, 4G (optional)			
Remote Access	Redback Portal or MyRedback app			
Remote Firmware Updates	Supported			
	Includes 1x utility grade energy meter (class 1)			
Product Compliance		includes 1x utility gra	ue energy meter (class 1)	
Product Compliance  Certification, Standards and Approvals	AS/NZS 4777.2:2020 • IEC 62116:2014 • IEC 60529 • RCM • IEC 62109-1:2010 • IEC 62040-1:2017 • EN			
	61000 • RCM (LVD, EMC, RoHS directives) • IEC 62109-2;2011 • IEC 62477-1;2012			
Designed with Installation Standards Considered	AS/NZS 3000:2018 • AS/NZS 5033:2021 • AS/NZS 5139:2019			

