The Smart Inverter

redback technologies

The Redback Smart Inverter is designed for Australian households looking to invest in solar. Designed and tested in Australia[1], the single-phase grid-tied solar PV inverter series is affordable yet robust and built to survive in harsh Australian outdoor conditions. In-built Smart Load Control allows relay functionality for a single load. Available in four sizes (5kVA, 6kVA, 8kVA & 10kVA), with a smart meter and Wi-Fi dongle coming standard at no extra cost. Ethernet-enabled EMS available as an upgrade.

SI8000 / SI10000

SI5000 / SI6000

5kVA, 6kVA, 8kVA or 10kVA options

Smart meter & Wi-Fi dongle included

Smart load control

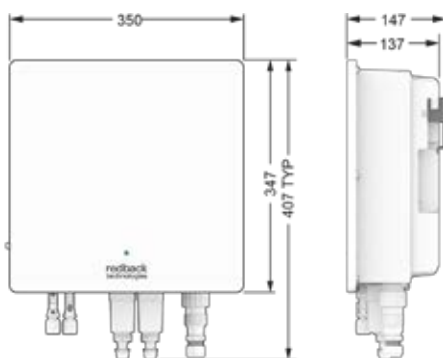**Easy monitoring app and portal**

Australian-supported 10-year warranty

Indoor or outdoor installation

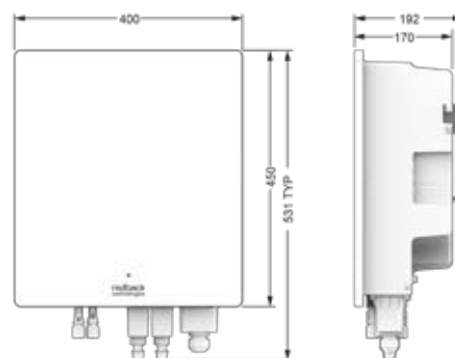[1] *Certification conducted overseas in parallel with in house testing in Australia*

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Product Model	SI5000	SI6000	SI8000	SI10000
PV Port				
Maximum Recommended PV Input Power[1]	7500Wp	9000Wp	12000Wp	15000Wp
Number of MPPTs	2		2	
Strings per MPPT Input	1/1		2/1	
MPPT Operating Voltage (range)[1]	DC 70 - 540V		DC 70 - 540V	
Maximum Input Voltage (Vmax)	DC 550V		DC 550V	
Maximum Current (Imp)[1]	DC 13.5/13.5A[2]		DC 27/13.5A[2]	
Short Circuit Current (Isc)	DC 20/20A[3]		DC 40/20A[3]	
Grid Interactive Port				
Nominal Output Voltage	AC 230V		AC 230V	
Nominal Output Frequency	50 Hz		50 Hz	
Max. Output Current	AC 25A	AC 27.3A	AC 40A	AC 45.5A
Rated Output Apparent Power	5000VA	6000VA	8000VA	10000VA
Peak Output Apparent Power	5500VA	6000VA	8800VA	10000VA
Power Factor (range)	0.8 lagging to 0.8 leading			
Output Voltage THD	<3%			
General Information				
Operating Temperature	-25°C to 60°C			
Operating Relative Humidity	0 - 100%			
Operating Altitude	0 - 4000m			
Protective Class	I			
Ingress Protection Rating	IP65			
AC Overvoltage Category	OVC III			
DC Overvoltage Category	OVC II			
Active Anti-islanding Method	Frequency Shift			
Inverter Topology	Non-isolated			
Country of Origin	China			
Demand Response Modes	DRM 0			
Standby Self-Consumption	<6W			
Noise Emissions	<30 dBA			
Warranty	10 Years			
Efficiency				
Maximum Efficiency	97.3%		97.5%	
European Efficiency	96.5%		96.8%	
Physical Data				
Installed Weight	8.5kg		16kg	
Material	Aluminium			
Finish	Sealed and powder coated			
PV Port Isolator				
Utilisation Category	DC-PV2			
Communications Ports and Protocols				
Relays	Direct IO; on kWh Meter			
User Interface				
Front Panel Display	Coded, coloured LED			
Communications	Bluetooth for commissioning; Wi-Fi for remote access; Ethernet (Optional) NFC			
Remote Access	Web Portal; MyRedback App; Redback Install app			
Remote Firmware Updates	Supported			
Power/Energy Monitoring	Includes 1 x utility grade energy meter (class 1)			
Certifications and Approvals	AS/NZS 4777.2:2020 IEC 62109-1:2010 IEC62109-2:2011 IEC 62116:2014 IEC 60529 EN 61000 RCM CE			
Designed with Installation Standards Considered	AS/NZS 3000:2018 AS/NZS 5033:2014 (inc. Amd 1 & 2)			

SI5000 & SI6000 Smart Inverter — 350, 347 TYP / 407 TYP, 147, 137

SI8000 & SI10000 Smart Inverter — 400, 450 / 531 TYP, 192, 170

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[1] Max PV Input Power is determined by the appropriate selection of panels within the MPPT voltage and current range
[2] With firmware 120602
[3] Manufacturer's declared and tested Max Short Circuit Current (Isc Max)