Gen-3 Hybrid Battery 3-phase

RED-H3-TxxHV

Stronger Power. Confident Control.
An all-in-one system that combines inverter and battery storage in one durable, Australian-engineered system. Designed for three-phase homes, to thrive in Australian household conditions.

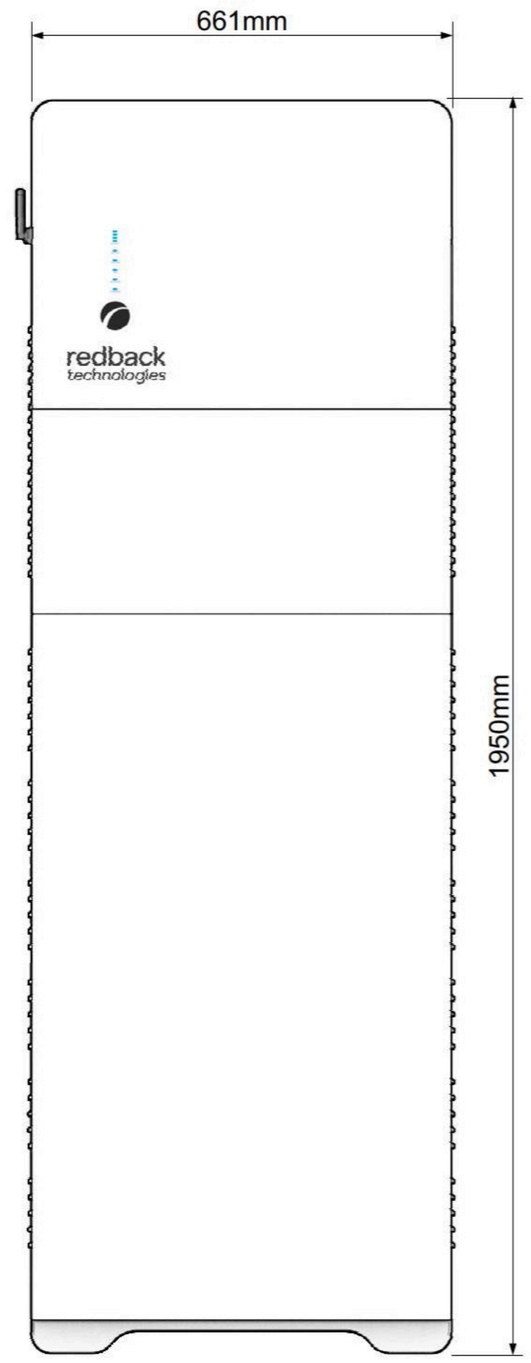
Combining real-time monitoring, smart automation, and up to 70kWh of battery storage to give you greater control over your energy.

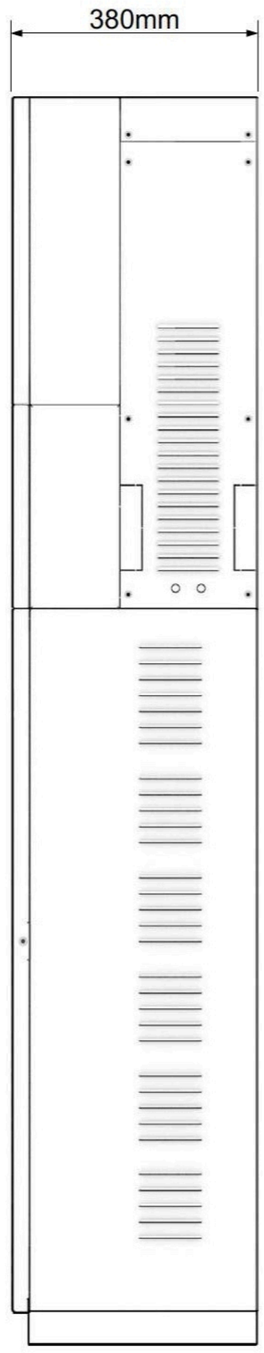


- Up to 70kWH Battery Storage
- Backup supply in a power outage
- Wi-Fi and 4G compatible
- Smart Load Control, VPP Compatability
- Indoor or outdoor installation
- 10-year Australian-backed warranty
- Easy monitoring app and portal

Specifications

	RED-H3-T10HV	RED-H3-T15HV	RED-H3-T20HV	RED-H3-T25HV	RED-H3-T30HV
PV Port					
Maximum PV Input Power[1]	20,000Wp	30,000Wp	40,000Wp	45,000Wp	45,000Wp
Number of MPPTs	3				
Strings per MPPT Input	2/2/2				
MPPT Operating Voltage (range)	DC 180-900V				
Start-up Voltage	DC 100V				
Maximum Input Voltage (Vmax)	DC 900V				
Maximum Current (Imp)	DC 40/40/40A				
Short Circuit Current (Isc)	DC 50/50/50A				
Grid Interactive Port					
Max. Output Apparent Power	9,999VA	16,500VA	22,000VA	27,500VA	29,999VA
Nominal Output Voltage	AC 380 / 400 / 415V				
Nominal Output Frequency	50Hz / 60Hz				
Max. Output Current	AC 14.5A	AC 24.0A	AC 31.9A	AC 39.9A	AC 43.4A
Max. Input Current	AC 28.3A	AC 28.3A	AC 37.7A	AC 47.2A	AC 56.6A
Power Factor (range)	0.8 lagging to 0.8 leading				
Output Voltage THD	<3%				
Backup Port					
Nominal Output Voltage	AC 3+N+PE, 220/380V, 230/400V, 240/415V				
Nominal Output Frequency	50Hz				
Maximum Output Current	AC 14.5A	AC 21.8A	AC 29A	AC 36.3A	AC 43.5A
Rated Apparent Power (on-grid)	9,999VA	15,000VA	20,000VA	25,000VA	29,999VA
Rated Apparent Power (off-grid)	9,999VA	15,000VA	20,000VA	25,000VA	29,999VA
Peak Apparent Power (3 seconds)	9,999 VA	22,500VA	30,000VA	37,500VA	45,000VA
Output Voltage THD	<3%				
Battery Port					
Number of Independent Battery Inputs	2				
Voltage (nominal)	DC 180-800V				
Max. Current (charge)	DC 2*50A				
Max. Power (charge)	DC 9,999W	DC 15,000W	DC 20,000W	DC 25,000W	DC 29,999W
Max. Current (discharge)	DC 2*50A				
Max. Power (discharge)	DC 10,000W	DC 15,000W	DC 20,000W	DC 25,000W	DC 29,999W
Battery Type	LiFiPO4				
Battery Depth of Discharge	95%				
General Information (Inverter)					
Operating Temperature	-40°C to 60°C				
Operating Temperature Derated Output	Over 45°C				
Operating Relative Humidity	0-100%				
Operating Altitude	0-4000m (>3000m power derating)				
Protective Class	I				
Ingress Protection Rating	IP66 (Outdoors)				
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 0				
Standby Self-Consumption	32W				
Noise Emissions	<50 dBA[2]				
Installed Weight	68.6kg				
Material	Aluminium, Stainless steel fittings				
Finish	Sealed and powder coated				
Warranty	5 years or 10 years (additional conditions apply)[3]				
Efficiency					
Maximum Efficiency	97.60%				
European Efficiency	97.00%				
Isolation Devices					
	Utilisation Category				
PV Port Isolator	DC-PV2				
Grid Interactive Port	C				
Backup Port	C				
Battery Port	B/C				
Load Control					
Relays	Controllable via connection to Redback power meter				
Battery Enclosure Data					
Enclosure Model	RED-P1-BE 14/21/28/35 HV				
Number of Battery Units	2-5				
Storage Capacity	14-35kWh				
Battery System Model	RED-P1-7000HV				
Maximum Capacity	70kWh				
Nominal Voltage	DC 140.8-352V				
Rated Current	DC 95A				
Protective Class	I				
Ingress Protection Rating	IP54 (outdoors)				
Dimensions (W x D x H)	652 x 380 x 1300/1900mm				
Material	Aluminium cabinet and front cover				
Finish	Powdercoat and internal sealants; Stainless fittings				
User Interface					
Front Panel Display	Coded, coloured LEDs				
Communications	Bluetooth for commissioning; Wi-Fi, ethernet or 4G 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					
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 • IEC 62109-2:2011 • IEC 62477-1:2012 • CE Mark (LVD, EMC, RoHS directives)				
Designed with Installation Standards Considered	AS/NZS 3000:2018 • AS/NZS 5033:2021 • AS/NZS 5139:2019				





[1]Max PV Input Power is determined by the appropriate selection of panels within the MPPT voltage and current range, and actual design needs to be compliant to local regulation.
[2]Measured in Redback laboratory at 1m in front of Inverter
[3]Additional internet connection conditions apply to achieve 10-year warranty. Please see the applicable Redback Product Warranty document.

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