redback technologies

Powering Australian Homes Since 2015

1300 240 182 info@redbacktech.com redbacktech.com

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

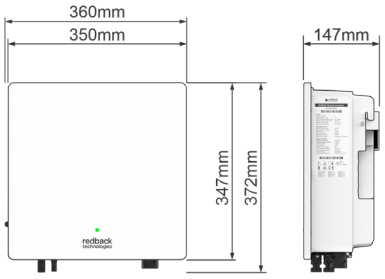
- Easy install
- Inverter & battery sizing options
- Marketing-leading VPP functionality
- Designed for Aussie conditions
- Evolving technology
- Fast and simple commissioning

The Redback I-Series

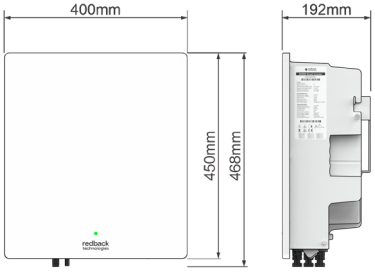
Affordable yet robust grid-tie inverters, built to survive in harsh Australian outdoor conditions. In-built Smart Load Control allows relay functionality for a single load. Start with a solar system now, and add a Redback battery in the future.

- Single & 3-phase options
- Indoor or outdoor installation
- Smart meter & Wi-Fi dongle included
- 10-year Australian-backed warranty
- Smart Load Control
- Easy monitoring app and portal

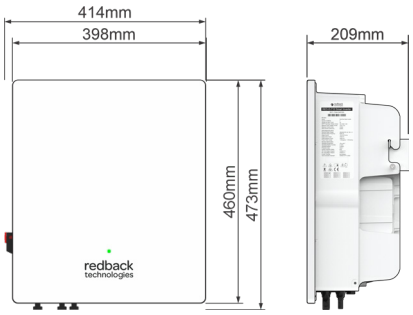
Smart Inverter & 3-Phase Smart Inverter



SI5000
Smart Inverter



SI10000
Smart Inverter



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

	SI5000	SI10000
PV Port		
Maximum PV Input Power[1]	7,500Wp	15,000Wp
Number of MPPTs	2	
Strings per MPPT Input	1/1	1/2
MPPT Operating Voltage (range)	DC 70 - 540V	
Start-up Voltage	DC 90V	
Maximum Input Voltage (Vmax)	DC 550V	
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		
Max. Output Apparent Power	5,000VA	10,000VA
Nominal Output Voltage	AC 230V	
Nominal Output Frequency	50Hz	
Max. Output Current	AC 25.00A	AC 45.50A
Power Factor (range)	0.8 lagging to 0.8 leading	
Output Voltage THD	<3%	
General Information		
Operating Temperature	-25°C to 60°C	
Operating Temperature Derated Output	below 10°C and over 45°C	
Operating Relative Humidity	0-100%	
Operating Altitude	4000m	
Protective Class	I	
Ingress Protection Rating	IP65 (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	<6W	
Noise Emissions	<30 dBA	
Weight	8.5kg	16kg
Material	Aluminium	
Finish	Sealed and powder coated	
Warranty	10 Years	
Efficiency		
Maximum Efficiency	97.3%	97.50%
European Efficiency	96.5%	96.80%
PV Port Isolator		
Utilisation Category	DC-PV2	
Load Control		
Relays	Redback Smart Load Control using Direct IO; on kWh meter	
User Interface		
Front Panel Display	Coded, coloured LEDs	
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		
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	

	RED-I3-T10	RED-I3-T15
PV Port		
Maximum PV Input Power[1]	15,000Wp	22,500Wp
Number of MPPTs	2	
Strings per MPPT Input	1/2	2/2
MPPT Operating Voltage (range)	DC 160 - 1000V	
Start-up Voltage	DC 180V	
Maximum Input Voltage (Vmax)	DC 1100V	
Maximum Current (Imp)	DC 15/30A	DC 30/30A
Short Circuit Current (Isc)	DC 20/40A	DC 40/40A
Grid Interactive Port		
Max. Output Apparent Power	9,999VA	16,500VA
Nominal Output Voltage	AC 380/400/415V	
Nominal Output Frequency	50Hz / 60Hz	
Max. Output Current	AC 14.50A	AC 23.91A
Power Factor (range)	0.8 lagging to 0.8 leading	
Output Voltage THD	<3%	
General Information		
Operating Temperature	-25°C to 60°C	
Operating Temperature Derated Output	below 10°C and over 45°C	
Operating Relative Humidity	0-100%	
Operating Altitude	4000m	
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	<1W (at night), <10W (standby)	
Noise Emissions	<30 dBA	
Weight	18.7kg	20.1kg
Material	Aluminium	
Finish	Sealed and powder coated	
Warranty	10 Years	
Efficiency		
Maximum Efficiency	98.00%	98.00%
European Efficiency	97.20%	97.40%
PV Port Isolator		
Utilisation Category	DC-PV2	
Load Control		
Relays	Redback Smart Load Control using Direct IO; on kWh meter	
User Interface		
Front Panel Display	Coded, coloured LEDs	
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		
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	

[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.

V3.0
Smart Inverter available now
3-Phase Smart Inverters coming Q1 2025

The Redback H-Series

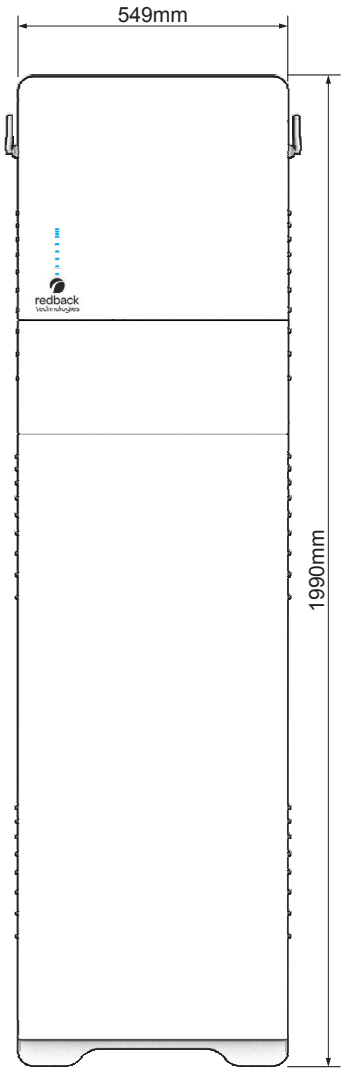
An all-in-one solution, engineered to be smarter, larger and more robust; with an easier installation experience and fewer return site visits. Redback's H-Series offers AC and DC coupled options for single-phase homes, 3-phase homes, and homes with high energy needs or multi-facing roofs.

- 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 Australian-backed warranty
- Easy monitoring app and portal

Hybrid Battery System

redback technologies

	SH5000-G3	SH6000-G3
PV Port		
Maximum PV Input Power[1]	8000Wp	9600Wp
Number of MPPTs	2	
Strings per MPPT Input	1/1	
MPPT Operating Voltage (range)	DC 90-520V	
Start-up Voltage	DC 90V	
Maximum Input Voltage (Vmax)	DC 600V	
Maximum Current (Imp)	DC 16/16A	
Short Circuit Current (Isc)	DC 24/24A	
Grid Interactive Port		
Max. Output Apparent Power	5,000VA	6,000VA
Nominal Output Voltage	AC 220/230/240V	
Nominal Output Frequency	50Hz	
Max. Output Current	AC 21.7A	AC 26.1A
Max. Input Current	AC 32A	AC 40A
Power Factor (range)	0.8 lagging to 0.8 leading	
Output Voltage THD	<3%	
Backup Port		
Nominal Output Voltage	AC 220/230/240V	
Nominal Output Frequency	50Hz	
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	AC 6000VA
Peak Apparent Power	7000VA (60s max)	8000VA (60s max)
Output Voltage THD	<3%	
Battery Port		
Voltage (nominal)	DC 42-58V	
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	Li-ion	
Battery Depth of Discharge	95%	
General Information (Inverter)		
Operating Temperature	-25°C to 60°C	
Operating Temperature Derated Output	Below 10°C and over 45°C	
Operating Relative Humidity	0 - 95%	
Operating Altitude	3000m	
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	<20W	
Noise Emissions	<35 dBA	
Installed Weight	63kg	
Material	Aluminium	
Finish	Sealed and powder coated	
Warranty	10 Years	
Efficiency		
Maximum Efficiency	97.50%	
Maximum Battery to Load Efficiency	93.51%	
European Efficiency	96.20%	
Isolation Devices		
	Utilisation Category / Isolator Rated Operational Current	
PV Port Isolator	DC-PV2 / 55A	
Grid Interactive Port	C / 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	SH-G3-BE	
Number of Battery Units	2-4	
Storage Capacity	9.6-19.2kWh	
Battery System Model	US5000	
Maximum Capacity	19.2kWh	
Nominal Voltage	DC 48V	
Rated Current	DC 120A	
Protective Class	I	
Ingress Protection Rating	IP54 (outdoors)	
Dimensions (W x D x H)	540 x 363 x 1270mm	
Material	Aluminium	
Finish	Sealed and powder coated	
User Interface		
Front Panel Display	Coded, coloured 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	
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 5139:2019 • AS/NZS 5033:2021	



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V3.0
Coming Q4 2024

Hybrid Battery Max

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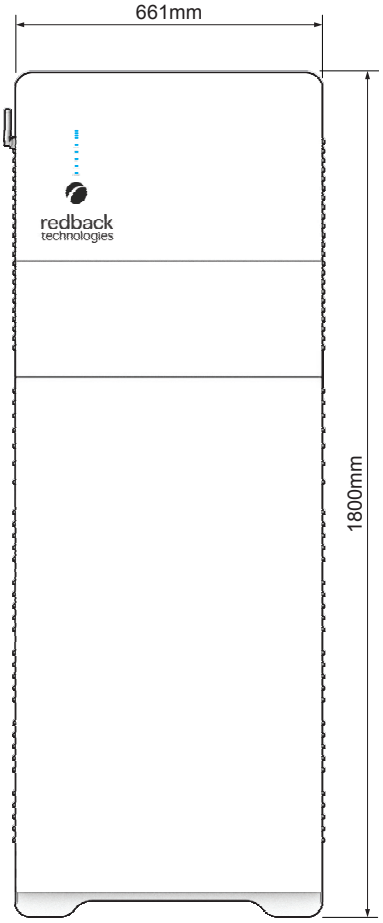
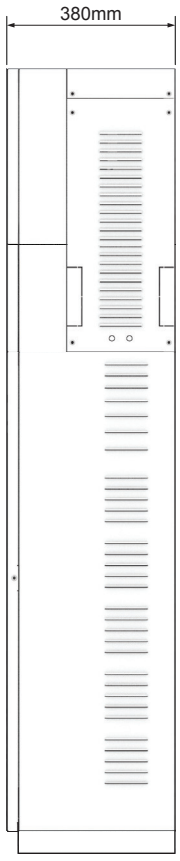
	RED-H3-S05HV	RED-H3-S06HV	RED-H3-S08HV	RED-H3-S10HV
PV Port				
Maximum PV Input Power[1]	7,500Wp	9,000Wp	12,000Wp	15,000Wp
Number of MPPTs	3			
Strings per MPPT Input	1/1/1			
MPPT Operating Voltage (range)	DC 90-500V			
Start-up Voltage	DC 100V			
Maximum Input Voltage (Vmax)	DC 600V			
Maximum Current (Imp)	DC 16/16/16A			
Short Circuit Current (Isc)	DC 19.2/19.2/19.2A			
Grid Interactive Port				
Max. Output Apparent Power	4,999VA	6,600VA	8,800VA	9,999VA
Nominal Output Voltage	AC 220/230/240V			
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)	0.8 lagging to 0.8 leading			
Output Voltage THD	<3%			
Backup Port				
Nominal Output Voltage	AC 220/230/240V			
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)	5,000VA	6,000VA	8,000VA	10,000VA
Peak Apparent Power	6,000VA (60s max)	7,200VA (60s max)	9,600VA (60s max)	12,000VA (60s max)
Output Voltage THD	<3%			
Battery Port				
Voltage (nominal)	DC 80-450V			
Max. Current (charge)	DC 50A			
Max. Power (charge)	DC 5,000W	DC 6,000W	DC 8,000W	DC 10,000W
Max. Current (discharge)	DC 50A			
Max. Power (discharge)	DC 5,000W	DC 6,000W	DC 8,000W	DC 10,000W
Battery Type	Li-ion			
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% (non-condensing)			
Operating Altitude	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	<10W (at night)			
Noise Emissions	<35 dBA			
Installed Weight	40kg			
Material	Aluminium			
Finish	Sealed and powder coated			
Warranty	10 Years			
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	Redback Smart Load Control using Direct IO; on kWh meter			
Battery Enclosure Data				
Enclosure Model	RED-H3-BE25HV			
Number of Battery Units	2-5			
Storage Capacity	10-25kWh			
Battery System Model	RED-P1-5000HV			
Maximum Capacity	25kWh			
Nominal Voltage	DC 140.8-352V			
Rated Current	DC 50A			
Protective Class	I			
Ingress Protection Rating	IP54 (outdoors)			
Dimensions (W x D x H)	652 x 380 x 1150mm			
Material	Aluminium			
Finish	Sealed and powder coated			
User Interface				
Front Panel Display	Coded, coloured 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			
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			





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V3.0
Coming Q1 2025

Hybrid Battery 3-Phase

redback technologies

	RED-H3-T10HV	RED-H3-T15HV	RED-H3-T20HV	RED-H3-T30HV
PV Port				
Maximum PV Input Power[1]	20,000Wp	30,000Wp	40,000Wp	45,000Wp
Number of MPPTs	3			
Strings per MPPT Input	2/2/2			
MPPT Operating Voltage (range)	DC 180-900V			
Start-up Voltage	DC 180V			
Maximum Input Voltage (Vmax)	DC 1000V			
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	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 43.4A
Max. Input Current	AC 28.3A	AC 28.3A	AC 37.7A	AC 56.6A
Power Factor (range)	0.8 lagging to 0.8 leading			
Output Voltage THD	<3%			
Backup Port				
Nominal Output Voltage	AC 380/400/415V			
Nominal Output Frequency	50Hz/ 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	<3%			
Battery Port				
Number of Independent Battery Inputs	2			
Voltage (nominal)	DC 180-800V			
Max. Current (charge)	DC 50A			
Max. Power (charge)	DC 10,000W	DC 15,000W	DC 20,000W	DC 30,000W
Max. Current (discharge)	DC 50A			
Max. Power (discharge)	DC 10,300W	DC 15,300W	DC 20,300W	DC 30,300W
Battery Type	Li-ion			
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% (non-condensing)			
Operating Altitude	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	<10W (at night)			
Noise Emissions	<35 dBA*			
Installed Weight	55kg			
Material	Aluminium			
Finish	Sealed and powder coated			
Warranty	10 Years			
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	Redback Smart Load Control using Direct IO; on kWh meter			
Battery Enclosure Data				
Enclosure Model	RED-H3-BE25HV			
Number of Battery Units	3-10 (secondary battery enclosure needed if 6 or more battery units used)			
Storage Capacity	15-50kWh			
Battery System Model	RED-P1-5000HV			
Maximum Capacity	50 kWh (25kWh per battery enclosure)			
Nominal Voltage	DC 211.2 - 704V			
Rated Current	DC 50A			
Protective Class	I			
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, coloured 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			
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			
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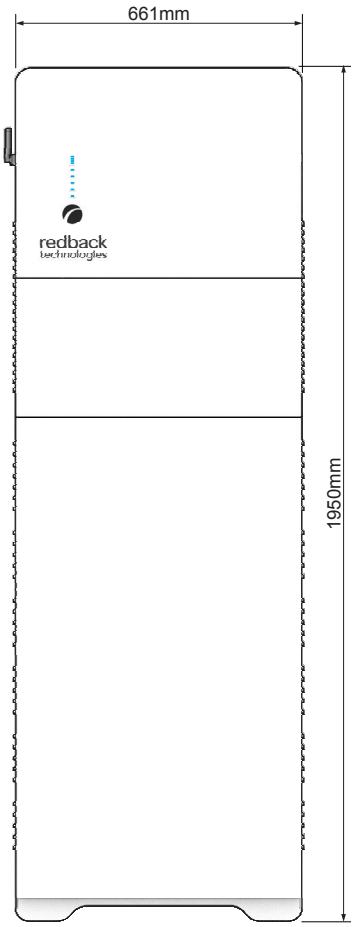

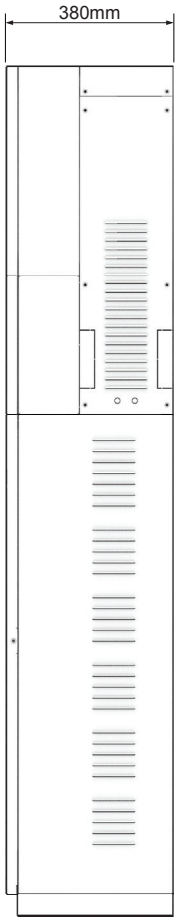

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V3.0
Coming Q1 2025