

SYSTEM PACKAGE DATA SHEET

Package 5: Solis S6 + Solis-Dyness PowerBox Pro

Solis S6 5 kW + 40.96 kWh PowerBox Pro - preliminary battery package reference for Australian residential or light-commercial applications.



Package configuration

4 x 10.24 kWh low-voltage PowerBox Pro batteries connected in a manufacturer-approved parallel arrangement.

Hybrid inverter: S6-EH1P5K-L-PLUS-AU

Battery system: 4 x Solis-Dyness PowerBox Pro 10.24 kWh

Perfect for: Homes wanting very large low-voltage storage capacity with a 5 kW single-phase hybrid inverter.

40.96 kWh	36.86 kWh*	5.0 kW	Single-phase
Nominal storage	Usable / reference	Inverter rating	Grid phase

Package configuration

Component	Selected model / quantity
Battery storage	4 x 10.24 kWh low-voltage PowerBox Pro batteries connected in a manufacturer-approved parallel arrangement.
Hybrid inverter	1 x S6-EH1P5K-L-PLUS-AU, 5.0 kW single-phase
Monitoring	Manufacturer app / portal, subject to communications hardware and internet connection
System type	Hybrid battery energy-storage package; PV array is not included in this package sheet
Final scope	Backup circuits, metering, gateway, protection, cable route and switchboard works are site dependent

Capacity reconciliation and important correction

IMPORTANT TECHNICAL NOTE

Four 10.24 kWh units provide 40.96 kWh nominal. At the datasheet recommended 90% depth of discharge, the indicative usable energy is about 36.86 kWh. The joint datasheet rounds each unit to 10.2 kWh.

Final compatibility, approved-product status, firmware, battery quantity, protection, installation clearances and backup design must be confirmed against current manufacturer instructions before quotation and procurement.

1. BATTERY STORAGE SYSTEM

4 x Solis-Dyness PowerBox Pro 10.24 kWh

Technical values below are consolidated from the referenced manufacturer datasheet and package capacity calculations.

Battery parameter	4-unit package reference value
Chemistry	LiFePO4 (LFP)
Product	Solis-Dyness PowerBox Pro
Individual nominal energy	10.24 kWh marketed; 10.2 kWh in the joint reference datasheet
Quantity	4 units in parallel, subject to approved wiring and communication topology
Package nominal energy	40.96 kWh using 10.24 kWh nameplate value
Recommended usable energy	Approx. 36.86 kWh at 90% recommended DOD
Nominal / operating voltage	51.2 V / 44.8-57.6 V
Rated power per unit	5.1 kW
Recommended current per unit	100 A charge / discharge
Weight	103 kg each; approx. 412 kg total
Dimensions	555 x 928 x 210 mm each
Ingress protection	IP65
Temperature	Charge 0 to +55 C; discharge -20 to +55 C
Communication	CAN / RS485 / RS232
Expansion	Reference sheet states up to 50 units in parallel
Cycle / warranty reference	>=6000 cycles / 10 years, subject to current Australian warranty terms

Capacity and architecture review

Item	Package interpretation
Nominal storage	40.96 kWh
Usable / reference storage	36.86 kWh*
Battery arrangement	4 x 10.24 kWh low-voltage PowerBox Pro batteries connected in a manufacturer-approved parallel arrangement.
System limitation	Maximum AC output and charging/discharging are limited by the selected inverter, BMS, settings and operating conditions.

Battery installation considerations

- Confirm the exact battery model suffix, matching master/control module and compatible firmware before ordering.
- Maintain manufacturer clearances, floor or wall loading limits, restricted-location requirements and suitable mechanical protection.
- Provide compliant isolation, overcurrent protection, earthing, communications and emergency shutdown labelling.
- Battery installation location, combustible-surface treatment, bollards and smoke-alarm requirements are subject to site conditions and current Australian Standards.
- Register the product and retain serial numbers, commissioning data, photos and customer handover documentation.

Full manufacturer source links are provided on the final page of this package data sheet.

2. HYBRID INVERTER AND PACKAGE COMPATIBILITY

S6-EH1P5K-L-PLUS-AU

Reference inverter data and package-level compatibility review.

Inverter parameter	S6-EH1P5K-L-PLUS-AU reference value
Type / phase	Single-phase low-voltage hybrid inverter
Rated AC output	5 kW
Battery voltage range	40-60 V
Max. charge / discharge power	5 kW
Max. charge / discharge current	112 A
Backup output	5 kW rated; 2 x rated power for 10 seconds
Backup switch time	<10 ms
Maximum efficiency	96.2%
Battery-to-AC max. efficiency	94.9%
Ingress protection	IP66
Dimensions / weight	335 x 560 x 227 mm / 22 kg
Monitoring	LED, Bluetooth and app; optional Wi-Fi, GPRS or LAN
Australian grid standard	AS 4777

Compatibility review

Compatibility check	Assessment
Voltage	PowerBox Pro operating range 44.8-57.6 V is within the inverter battery range of 40-60 V.
Current	The inverter maximum battery current is 112 A. Parallel battery cabling and current sharing must follow manufacturer guidance.
Power limit	Despite 40.96 kWh storage, maximum charge/discharge through the selected inverter is 5 kW.
Parallel architecture	Confirm busbars, protection, communications, firmware and the exact Solis compatibility list before installation.

Indicative installation and handover scope

Function	Expected scope	Site-dependent confirmation
Battery mounting	Approved support, clearances and mechanical protection	Wall/floor construction, restricted locations, weather exposure and access
AC and switchboard works	Dedicated protection, isolation, earthing and compliant connection	Available capacity, mains size, phase arrangement and switchboard upgrade
Backup arrangement	Essential-load or whole-home backup configuration	Load assessment, phase balance, neutral arrangement, bypass and generator interaction
Metering and controls	Compatible meter/CT/gateway and energy-management setup	Cable route, communications and network/export requirements
Commissioning	Firmware, operating mode, protection settings, app setup and functional tests	Customer tariff, export limit, reserve SOC and backup priorities
Handover	Serials, shutdown procedure, monitoring access and warranty registration	Final manufacturer and regulatory documentation

Inverter source: Solis S6-EH1P(3-8)K-L-PLUS-AU datasheet, AU V1.6 (2025-05).
[Open manufacturer inverter document](#)

3. SOURCES, WARRANTY AND COMPLIANCE NOTES

Package 5: Solis S6 + Solis-Dyness PowerBox Pro

This package sheet consolidates selected technical information for preliminary design and customer presentation. The latest manufacturer documentation remains authoritative.

Reference documents

Component	Reference document	Official / reference link
Battery	Solis-Dyness PowerBox Pro low-voltage battery datasheet (Australian reference copy).	Open battery source
Hybrid inverter	Solis S6-EH1P(3-8)K-L-PLUS-AU datasheet, AU V1.6 (2025-05).	Open inverter source

Final pre-quotation and procurement checklist

Check	Required confirmation
Exact product identity	Full model suffix, master/slave or control-module quantities, current firmware and Australian approved-product listing.
System compatibility	Battery voltage, charge/discharge current, capacity limits, parallel architecture, communication protocol and manufacturer compatibility statement.
Site and network	Service phase, mains capacity, switchboard condition, backup load schedule, export restrictions and distributor requirements.
Safety and location	Clearances, restricted locations, fire separation, mechanical protection, smoke alarms, ventilation and environmental rating.
Protection and cabling	Battery/AC isolation, overcurrent protection, fault current, cable sizing, voltage drop, earthing, labels and shutdown procedure.
Warranty and registration	Current Australian warranty terms, commissioning records, serial numbers, internet registration and maintenance requirements.

Warranty wording

Warranty duration and usable-energy retention depend on the exact product model, registration, operating conditions, installation method and manufacturer policy applying in Australia at the date of supply. Warranty terms must be confirmed before they are included in a customer quotation.

Technical and commercial disclaimer

This consolidated package sheet is a preliminary technical and marketing-support document. It is not a construction drawing, final battery compatibility approval, network approval or substitute for current installation manuals. Final equipment models, battery quantities, voltage architecture, protection, cable sizing, backup loads, switchboard modifications, clearances, warranty terms and approved-product status must be confirmed following site inspection and before procurement. Installation must comply with applicable Australian Standards, distributor requirements, manufacturer instructions and local regulations. Specifications can change without notice.

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