

Scout LFPro Battery Bundles

10 – 25 kWh+

Off-Grid & Fringe of Grid
Households and Businesses



FEATURES

- **Flexible Installations:** Build custom energy systems with Scout LFPro Battery Bundles. Each bundle includes:
 - Polarium battery module/s
 - Polarium Solar Inverter Interface
 - USB - Modbus Cable to support connection to Polarium Studio (via PC)
 - 2-3U busbars (300A rating)
- **Smart Monitoring:** Real-time monitoring of battery parameters and performance via Bluetooth and supported inverters, accurately tracking SOC, SOH, Current, Voltage, and Temperature.
- **Proven Performance:** Polarium batteries are trusted by critical infrastructure across Australia for reliable backup power in essential services.
- **Inverter Agnostic:** Compliant with industry standards, supporting various inverter/charger platforms and installation types (AC Coupled & DC Coupled).
- **Cost of Ownership:** Combines safety, reliability, and smart features with affordability, maximizing solar benefits.



Safety

Exceeds safety standards with 5 layers of embedded protection and the most advanced Battery Management System, ensuring safety even under abnormal conditions.



Reliable

Equipped with a wide operating temperature range, patented Current Limiting Device (CLD), integrated pre-charge circuit, and 'black start' feature for world-class reliability.



Polarium Battery

Swedish engineered Polarium Lithium Iron Phosphate (LFP) chemistry batteries are renowned for exceptional safety, longevity, and environmental friendliness.

Scout LFPro Battery Bundles

10 – 25 kWh+ Off-Grid & Fringe of Grid Households and Businesses

Polarium 100 Ah Battery Specifications

Electrical Characteristics		Environmental Characteristics	
Enclosure Size	Suits 19" enclosure	Operating Temperature Discharging	-20 to +60 °C (-4 to 140 °F)
Lithium Chemistry	Lithium iron phosphate (LFP)	Operating Relative Humidity	According to ETSI 300 019-1-3 class 3.2 (0-95 %)
Rated Voltage	48 V	Storage Temperature	-20 +60 °C (-4 to 140 °F)
Rated Capacity (0.2 C, 25 °C to LVBD)	100 Ah	Physical Characteristics	
Rated Energy (0.2 C, 25 °C to LVBD)	5120 Wh	Weight (per battery)	Approx 39.3 kg (87 lbs)
Discharge Cutoff Current	100 A, 300 seconds	Dimensions (per battery)	W 440 D 441 H 132 mm (W 17.3" D 17.4" H 5.2")
End-of-Discharge Voltage (LVBD)*	40 V	Supported Inverters	
Charge Current Limitation (CLD)**	100 A	Selectronic	SP Pro SPMC480-AU / SPMC481-AU / SPMC482-AU
Charge Voltage for 100 % SOC	58.4 V	Victron Energy	EasySolar / MultiPlus / Quattro
		SMA	Sunny Island 4.4M / 6.0H / 8.0H
		CE+T	Sierra25

Safety & Compliance

Circuit Breaker	125 A, BMS Controlled, dual pole
IP Class	IP20
Communication Protocols	RS485, RJ45 (2) ports, Modbus
Safety Standards	Complies with 'Best Practice Guide for Battery Energy Storage Equipment - Electrical Safety Requirements - Version 1' AS IEC62619, AS/NZS 62638-1, UN38.3
Management & Monitoring Software	for PC (Studio) included for full local monitoring and management. Remote connection via Modbus

Polarium Solar Inverter Interface Specifications

Input Power

Power Input	Bus bar or cable connections to the battery power terminals
Operational Voltage	30-65 V
Auto Start Voltage	30 V
Shutdown Voltage	29 V

Communication

RS485/CAN (Out)	Communicates with customer defined protocols	RJ45, 8 COM 2
RS485/CAN (In)	Allows daisy chaining of the RS485 bus, allows MCU access to the CANbus	RJ45, 8 COM 1
RS485/CAN (Out)	Allows daisy chaining of the RS485 bus, allows MCU access to the CANbus. PC access (with Studio PC) to view battery status	RJ45, 8 COM 1
Bluetooth BLE	View real time battery status	Wireless

Indications

Power LED Green	Power on, Bluetooth connected
Power LED Off	Power off
Power LED Flashing	Power on, Bluetooth disconnected
RJ45 LED Off	No communication
RJ45 LED Yellow	Communication problem
RJ45 LED Green	Communication ok

Environmental

Operational Temperature	-20C to 60C
Ingress Protection	IP20
Humidity	20% to 95% RH

Standards

ETSI 300 386, FCC Part 15, AS/NZS 4268, ETSI EN300 328, EN50663, ETSI EN 300 328
IEC 62368, IEC 60950
RoHS

*Cut off when one cell reaches 2.5 V, 16 cells in series. Data subject to change without notice. **If the charge current is 100 A or higher, the battery will automatically reduce the charge current to 6-12 A temporarily. Data subject to change without notice.

Solar Energy Australia Pty Ltd

4 Beaumont Road, Mount Kuring-Gai NSW 2080 p: 1800 779 668 e: sales@solaraustralia.com.au

solaraustralia.com.au

