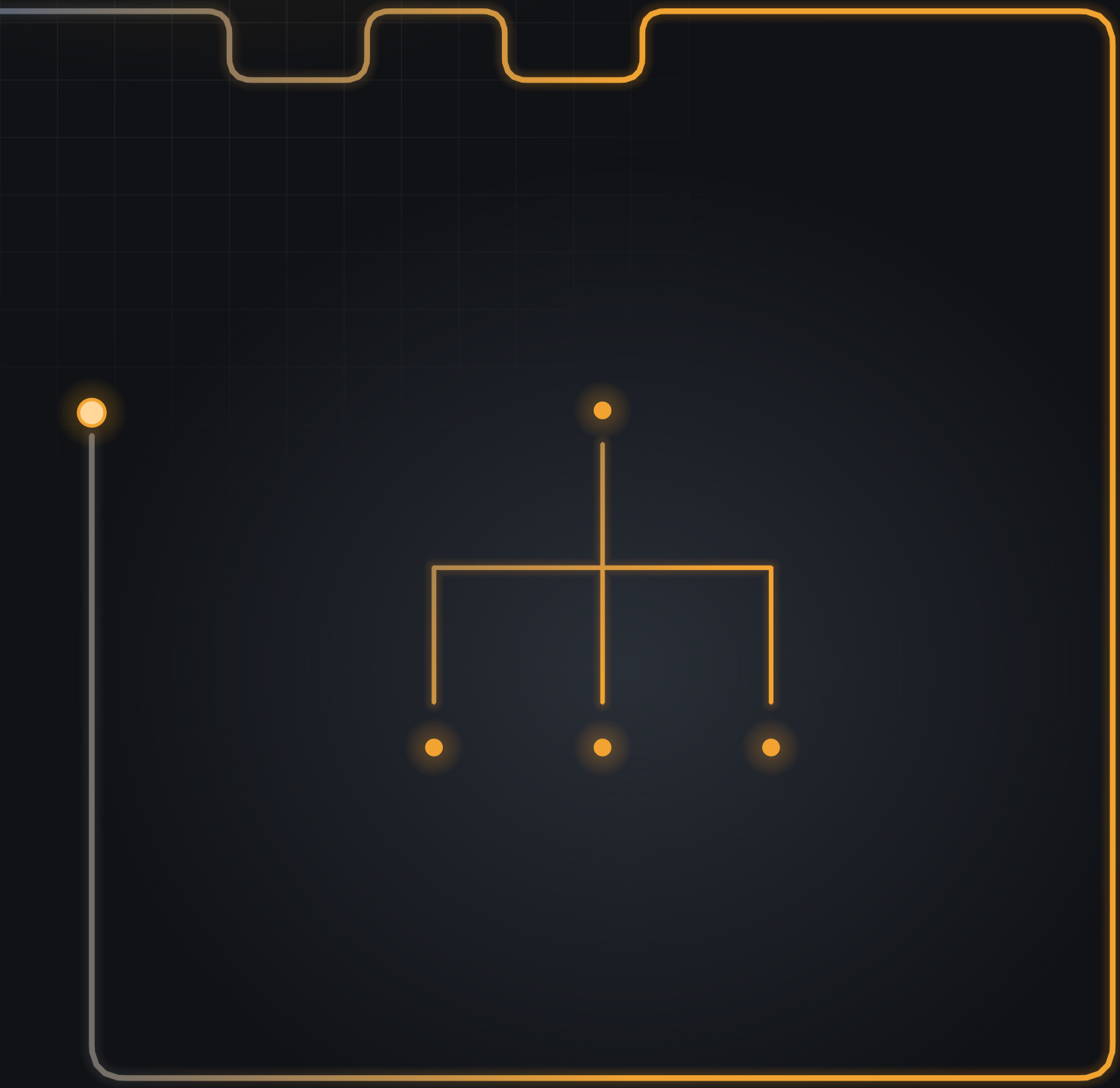
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PRODUCT SELECTION GUIDE

AERL Products

Power Conversion, Storage and Monitoring



CoolMax · LiFe² · Kakadu 120 · All-In-One · Nexus · EarthGuard · CoolPro

Product Selection Guide

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Document

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1.0.2

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11 / 2026

Audience
System designers, installers and buyers

Prices
Contact AERL or an AERL distributor

Format
A4 · 12 pages

About This Guide

This guide introduces every current AERL product family: what it is, its key ratings, and which documents to read. Start with the chooser in chapter 01, then turn to the product's section in chapter 02.

Ratings are summaries from each product's datasheet. Design and order from the datasheet and the documents named on each page: they are at aerl.com.au. For prices and availability, contact AERL or an AERL distributor.

Which Product Do I Need?

Chooser, typical systems, software, warranty registration

01

1.1 Chooser

I need to...	Product	Section
Charge a 24 V or 48 V battery from PV, wall mounted	CoolMax SRX 600/70-48	2.1
Charge a 120 V battery from PV, wall mounted	CoolMax SRX 600/30-120	2.1
Charge a battery from PV, in a 19-inch rack	CoolMax SRX-R	2.1
Store energy in a 48 V system (homes, sites, telecoms)	LiFe² 5120S in LiFe² cabinets	2.2
Store large amounts of energy in a 120 V class system	Kakadu 120	2.3
Supply a commercial site with PV, battery and inverter in one outdoor cabinet, 25–50 kW	All-In-One	2.4
The same, off grid, at 125 kW and 257 kWh	All-In-One Max 125/257	2.4
A three-phase hybrid inverter for a high-voltage battery	Solinteg M2HT 25–50 kW	2.5
Monitor and manage equipment remotely in AERL Cloud	Nexus Gateway	2.6
A local touch-screen display of the system at the switchboard	Nexus HMI	2.7
Give an SRX the temperature and voltage of a battery without a BMS	Battery Sense	2.8

I need to...	Product	Section
Detect earth faults on DC circuits up to 600 V	EarthGuard EG-600 (two circuits) or EG-600-SC (one)	2.9
Protect a pipeline or structure from corrosion	CoolPro CP30, with a Surge Buster where lightning-prone	2.10

1.2 Typical Systems

System	Products
Off-grid home or site, 48 V	LiFe² 5120S batteries in a LiFe² cabinet; a battery inverter (Selectronic SP PRO, Victron, Deye, Solis or SMA Sunny Island); CoolMax SRX for DC-coupled solar; Nexus for AERL Cloud; EarthGuard EG-600
Large off-grid site, 120 V class	Kakadu 120 cabinets; Selectronic SP PRO SPLC1200 or SPLC1202 inverters; CoolMax SRX 600/30-120 (at least one per cabinet); Nexus as the EMS
Commercial site	All-In-One, on or off grid; All-In-One Max, off grid (grid connection pending CEC listing); off-grid parallel for more power
Cathodic protection, solar powered	CoolPro CP30 with Surge Buster; CoolMax SRX and LiFe² for the power supply; Nexus for monitoring

The AERL Compatibility Guide lists every documented combination.

1.3 Software

- **AERL Link** (Windows 10/11): sets up and updates CoolMax SRX and SRX-R controllers and EarthGuard devices over USB. Download from aerl.com.au/professionals.
- **AERL Cloud**: remote monitoring, alerts and service for equipment connected through a Nexus Gateway, at aerl.cloud.

1.4 Warranty Registration

Register products at **aerl.com.au/warranty-registration** where the warranty is extended on registration (CoolMax SRX and SRX-R, LiFe² 5120S, CoolPro CP30). Each product's warranty statement, at aerl.com.au, gives the full terms.

1.5 Change Log

Revision	Date	Change
1.0.1	11 / 2026	Grid-connected parallel systems no longer restricted in Australia.
1.0.0	11 / 2026	First issue.
1.0.2	11 / 2026	HMI-10 renamed Nexus HMI.

Product Families

CoolMax SRX and SRX-R, LiFe² 5120S, Kakadu 120

02

2.1 CoolMax SRX and SRX-R

Maximum power point tracking (MPPT) solar charge controllers for DC-coupled battery systems. The SRX is wall mounted; the SRX-R is the same charger as a module for 19-inch racks, two to a 2U shelf. A 600 V PV input lets long strings run from the array, and the array can be up to twice the controller's rating (130% at 24 V). On-board ground-fault detection, CAN, RS485 and USB; set up and updated with AERL Link. Australian engineered. The SRX 600/70-48 (48 V) is TÜV certified.



Rating	SRX 600/70-48	SRX 600/30-120	SRX-R 600/60-48	SRX-R 600/30-120
Battery	**24 / 48 V**	**120 V**	**24 / 48 V**	**120 V**
Max. charge current	**70 A**	**30 A**	**60 A**	**30 A**
Nominal charge power	**4032 W at 48 V**	**4320 W**	**3456 W at 48 V**	**4320 W**
Max. PV input (Voc)	**600 V**	**600 V**	**600 V**	**600 V**
MPP voltage range	**170–540 V**	**215–540 V**	**170–540 V**	**215–540 V**
Peak efficiency	**96.2%**	**96.2%**	**96%**	**96%**

Warranty: 2 years; 5 years registered within 60 days; 10 years with Plus 5.

Read: CoolMax SRX and SRX-R Datasheets (48 V, 120 V) and User Manuals; CoolMax SRX DC-Coupling Design Guide; SP PRO with CoolMax SRX Integration Guide.

2.2 LiFe² 5120S

A 5.12 kWh lithium iron phosphate (LFP) battery module for 48 V systems, 19-inch rack-mount. It runs Managed, over CAN bus with Deye, Victron Energy, Selectronic SP PRO and Solis inverters, or Self-Managed with inverters and chargers programmed by hand. Up to 64 modules in parallel; pre-wired cabinets hold 4, 6 or 10 modules, indoors (IP20) or outdoors (IP55). Supplied and supported by AERL.



Rating	LiFe² 5120S
Nominal voltage	**51.2 V DC**
Capacity	**5.12 kWh / 100 Ah**
Continuous charge / discharge	**100 A (1C at 25 °C)**
Peak discharge	**200 A (10.24 kW, 5 s)**
Warranty	**5 years; 10 registered within 60 days. Cabinets 2 years**

Read: LiFe² Datasheet; LiFe² 5120S Installation and Operation Manual; LiFe² Quick Start; LiFe² Managed Battery Integration Guide; LiFe² PCE Integration Guide; LiFe² System Sizing Guide.

2.3 Kakadu 120

An 88.4 kWh LFP battery cabinet at 140.8 V nominal, IP55, for large off-grid systems. It runs with an AERL Nexus Gateway on its CAN bus and is designed for DC coupling with the CoolMax SRX 600/30-120 and the Selectronic SP PRO SPLC1200 and SPLC1202. Up to 16 cabinets in parallel (1.41 MWh); the Kakadu Combiner Box parallels up to 4. Supplied and supported by AERL.



Rating	Kakadu-120-88.4
Nominal voltage	**140.8 V DC (112.2–165 V)**
Capacity	**88.4 kWh / 628 Ah**
Depth of discharge	**Up to 90%**
Continuous charge / discharge	**300 A at 25 °C (150 A per string)**
Warranty	**10 years. Combiner Box 2 years**

Read: Kakadu 120 Datasheet; Kakadu 120 User Manual; Kakadu Commissioning Guide (SPLC1202 and CoolMax SRX); Kakadu 120 SPLC12xx Sizing Guide.

2.4 All-In-One and All-In-One Max

Commercial energy storage systems in one outdoor cabinet: a Solinteg M2HT hybrid inverter, an LFP battery, BMS, fire protection and air conditioning. The All-In-One pairs five power ratings with four battery sizes; the All-In-One Max pairs 125 kW with 257 kWh. The All-In-One is for grid-connected and off-grid sites; the All-In-One Max is for off-grid sites (grid connection pending CEC listing). Both support generators and off-grid paralleling. Manufactured by Solinteg; supplied and supported by AERL.



Rating	AIO-25K to AIO-50K	AIO-MAX-125-257
Rated AC output	**25.0, 29.9, 30.0, 40.0 or 50.0 kW**	**125.0 kW**
Rated battery energy	**64.3, 80.3, 96.4 or 112.5 kWh (90% DoD)**	**257.2 kWh (231.48 kWh usable)**
Max. PV array	**50 to 80 kWp, 4 MPPTs**	**250 kWp, 6 MPPTs**
Back-up peak	**1.5 × rated power for 10 s**	**165 kVA for 10 s**
Off-grid paralleling	**Up to 10 units**	**Contact AERL**
Enclosure	**IP55 cabinet, IP66 inverter**	**IP55 cabinet, IP66 inverter**

Warranty: 10 years on the cabinet and battery; 5 years on the inverter, extendable to 10.

Read: All-In-One Datasheet, User Manual and Quick Start Guide; All-In-One Max 125/257 Datasheet; All-In-One System Sizing Guide.

2.5 Solinteg M2HT Hybrid Inverters

Three-phase hybrid inverters for high-voltage LFP batteries, sold on their own for systems built around a battery from Solinteg's compatibility list. Manufactured by Solinteg; supplied and supported by AERL.



Rating	M2HT 25–50 kW
Models	**25, 29.9, 30, 40, 50 kW**
Battery voltage	**150–840 V, 150 A**
MPPTs	**4**
Warranty	**5 years; extended warranty to 10**

Read: Solinteg M2HT 25–50 kW User Manual and Quick Start Guide; Solinteg M2HT 25–50 kW Paralleling & Generator Guide; AERL Compatibility Guide (batteries). For the M2HT 75–125 kW (grid connection pending CEC listing), contact AERL.

2.6 Nexus Gateway

The gateway between site equipment and AERL Cloud: it finds supported devices on its CAN bus (CoolMax SRX, LiFe², Kakadu 120, Battery Sense) and polls Modbus devices such as the Selectronic SP PRO and the CoolPro Meter Board, for remote monitoring, alerts, configuration and firmware updates. It is also the EMS of a Kakadu 120 system. The Nexus 4G adds a cellular modem, digital inputs and output relays. Australian engineered and made in Australia.



Rating	Nexus Lite (NEXUS-LITE)
Ports	**2 × CAN (linked), 1 × RS485, Ethernet, dual-band Wi-Fi**
Power	**12–60 Vdc, or 5 V USB-C**
Mounting	**Wall or DIN rail, IP20**
Operating temperature	**−20 to 50 °C**
Warranty	**2 years**

Read: Nexus Gateway Datasheet; Nexus SP PRO Set-Up Guide; LiFe² AERL Cloud Integration Guide; docs.aerl.cloud.

2.7 Nexus HMI

A 10.1-inch sunlight-readable touch screen with an embedded computer in a full-metal housing, for a local view of the system at the switchboard: live inverter and generator values, faults and alarms.



Rating	Nexus HMI (NEXUS-HMI-10)
Display	**10.1 in, 1280 × 800, 1000 cd/m²**
Interfaces	**2 × Ethernet, RS485, CAN, Wi-Fi, 4G LTE**
Power	**12–24 Vdc**
Protection	**IP65 front**
Warranty	**2 years**

Read: Nexus HMI Datasheet.

2.8 Battery Sense

A remote temperature and voltage sensor for battery banks without a BMS that reports them, typically lead-acid. It plugs into a CoolMax SRX's CAN port, which powers it, and gives the SRX the battery temperature and voltage for temperature-compensated charging and the low-temperature cutoff. Australian engineered and made in Australia.



Rating	Battery Sense (BAT-SENSE)
Voltage input	**18–200 Vdc**
Interface	**CAN bus (RJ45), up to 10 m**
Power	**5 V from the CoolMax CAN port**
Warranty	**2 years**

Read: Battery Sense User Manual.

2.9 EarthGuard EG-600 and EG-600-SC

Insulation monitoring devices for PV and battery systems: they detect insulation faults between DC conductors and earth, and alarm with a buzzer, LEDs and fail-safe relays. They support compliance with the earth-fault requirements of AS/NZS 5033 and AS/NZS 5139. The EG-600 monitors two circuits, the EG-600-SC one. Australian engineered and made in Australia.



Rating	EG-600	EG-600-SC
Monitored circuits	**2**	**1**
Circuit voltage	**40–600 Vdc**	**40–600 Vdc**
Trip threshold	**30 kΩ (firmware 2.2.1)**	**30 / 50 / 100 kΩ**
Supply	**12–60 Vdc**	**12–60 Vdc**
Warranty	**2 years**	**2 years**

Read: EarthGuard EG-600 Datasheet and User Manual; EarthGuard EG-600-SC Datasheet and User Manual.

2.10 CoolPro CP30 and Surge Buster

An impressed current cathodic protection (ICCP) controller with a high-current DC-DC converter, for remote, solar-powered sites: pipelines, tanks and structures. Passive cooling, IP65 enclosure, parallel operation for large structures, and optional reference-cell potential control. The Surge Buster lightning protection module is required in lightning-prone applications (pipelines or structures longer than 100 m or higher than 10 m) and optional elsewhere. CoolPro: Australian engineered. Surge Buster: Australian engineered and made in Australia.



Rating	CoolPro CP30
Max. output current	**30 A**
Battery input	**11–60 V**
Peak efficiency	**Up to 98%**
Enclosure	**IP65**
Surge Buster	**50 kA**
Warranty	**5 years; 7 registered. Surge Buster 2 years**

Read: CoolPro Datasheet; CoolPro User Manual; CoolPro Modbus RTU Communications Protocol.

Contact AERL

For product selection, system design, prices and availability, contact AERL sales on 1800 950 865 or sales@aerl.com.au. For technical support: support@aerl.com.au.

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