

# CoolMax SRX

## Charge Controller

Maximum Power Point Tracking (MPPT)



### Why choose the CoolMax?

- Superior Peak Power Efficiency > 99%
- Ultra-low heat Thermal Design
- Designed for Long Term Reliability
- Higher Input Voltages - Lower Install Costs
- Built-In Overload and Thermal Protection
- Common Positive Wiring Configuration
- Master/ Slave Configuration Options
- Interactive Touch Screen Configuration
- Smart Multi-Stage Battery Charging
- Compatible with most Battery Systems
- Compliant with IEC62109-1

### Models

- SRX 60 180
- SRX 45 290

### Optional Extras

- GFI Pack (Ground Fault Interruption)
  - a. Adds internal Ground Fault Interruption for (+/-) functionally ground systems.
- Remote Temperature Sensor (3-15 Metres)
  - a. Allows for utilization of the CoolMax Battery Temperature Compensation.

The CoolMax SRX features thirty years of AERL's MPPT experience, offering a superior tracking algorithm, an ultra-low loss, high efficiency thermal design, backed by our Australian factory warranty and local support.

With AERL's Record Breaking Conversion Efficiencies and Higher Input Voltage options, the SRX will improve your return on investment and reduce installation costs.

Available options include Ground Fault Detection and Interruption solutions and Remote Temperature Sensing for battery temperature compensation.

General Specifications	
Parameter	Typical
Weight	7 kg
Dimensions (L x W x H)	460 x 226 x 111 mm
Enclosure Type	Indoor Type1 / IP20
Input / Output Power Connectors	Screw Terminals (16mm <sup>2</sup> , AWG6)

Characteristics	SRX 60 180	SRX 45 290
Nominal Battery Voltage - Selectable	32 to 84V	48 to 132V
Maximum Charge Current	60A	45A
Recommended PV Array	5000W @ 84Vout(nom) 4300W @ 60Vout(nom) 3500W @ 48Vout (nom) 2300W @ 32Vout(nom)	5200W @ 132Vout(nom) 5000W @ 120Vout(nom) 4500W @ 96Vout(nom) 2300W @ 48Vout(nom)
Maximum PV Short Circuit Current	45A	35A
Maximum PV Voltage Open Circuit	180V	290V
Maximum Conversion Efficiency	99%	99%
Battery Temperature Compensation	Yes	Yes
Ambient Operating Temperature Range (Full Rated Output up to 80% Ambient ° C)	-20 to 50 °C	-20 to 50 °C
Remote Temperature Sensor Option	Yes	Yes
Storage Temperature	-30 to 70 °C	-30 to 70 °C
Self-Consumption	100mA @ 20V	75mA @ 40V
Communications Protocol Options	Modbus RTU & CAN bus	Modbus RTU & CAN bus
Communication Ports	RJ45 & USB	RJ45 & USB
Required Cabinet Air Exchange Rate (Intake @ 40°C)	40m <sup>3</sup> /hour	40m <sup>3</sup> /hour
Heatsink Temperature @ Full Power	35°C Rise	45°C Rise
Sealed Inductors & Internal Conformal Coating	Yes	Yes
Conforms to	IEC62109-1  RoHS CE & CTick	IEC62109-1  RoHS CE & CTick
Languages Available	English	English

Note: Specifications are subject to change without notice.

Disclaimer: Australian Energy Research Laboratories Pty Ltd, its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "AERL"):

- a) Disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.
- b) Assumes no responsibility or liability for loss or damage whether direct, indirect, consequential or incidental, which might arise out of use of such information. The use of any such information will be entirely at the user's risk.
- c) Reserves the right to change any AERL product, product specifications and data without notice to improve reliability, function or design or otherwise.