

# 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 all Battery Systems
- Compliant with IEC62109-1\*

#### Models

- SRX 60 180
- SRX 45 290

#### Optional Extras

1. Communications Pack
  - a. Adds CAN bus and Modbus functionality to the CoolMax via RS485 and USB ports.
2. Ground Fault Protection Pack
  - a. Adds internal Ground Fault protection to the CoolMax. Required for IEC62109-1 Compliance\*
3. Remote Temperature Sensor
  - a. Allows for utilization of the CoolMax Battery Temperature Compensation. Requires Comms Pack\*

The CoolMax SRX MPPT Solar Charge Controller features AERL's 30+ years of MPPT experience, offering a superior tracking algorithm with an ultra-low loss, high efficiency thermal design backed by our Australian factory warranty and local support.

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

Available options include on-board Ground Fault Detection for IEC62019-1 compliance and CAN bus/Modbus support for enhanced system networking and remote monitoring.

General Specifications	
Parameter	Typical
Weight	7 kg
Dimensions (L x W x H)	400 x 226 x 111 mm
Enclosure Type	Indoor Type1 / IP20
Input / Output Power Connectors	Amphenol H4 – Female (10mm <sup>2</sup> , AWG8)

Characteristics	SRX 60 180	SRX 45 290
Nominal Battery Voltage - Selectable	32 to 84V	48 to 132V
Maximum Charge Current	60A	45A
Maximum Recommended PV Array	5000W @ 84Vout(nom) 3800W @ 60Vout(nom) 3000W @ 48Vout (nom) 2000W @ 32Vout(nom)	5200W @ 132Vout(nom) 5000W @ 120Vout(nom) 4500W @ 96Vout(nom) 2300W @ 48Vout(nom)
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	RS485 & USB	RS485 & USB
Required Cabinet Air Exchange Rate (Intake @ 40C)	40m <sup>3</sup> /hour	40m <sup>3</sup> /hour
Operating Temperature of Heatsink @ Full Rated Power	35°C Rise	35°C Rise
Sealed Inductors & Internal Conformal Coating	Yes	Yes
Certifications	IEC62109-1 (Pending)  CE & CTick RoHS Compliant ISO 9001 Manufactured	IEC62109-1 (Pending)  CE & CTick RoHS Compliant ISO 9001 Manufactured
Languages Available	English	English

Note: Specifications are subject to change without notice.

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