

CoolMax SRX Charge Controller

Maximum Power Point Tracking (MPPT)



Why choose the CoolMax?

- High Input Voltage for Ease of Install
- On-Board Ground Fault Detection
- PV Array Oversizing Support (+33%)
- Superior Peak Power Efficiency – Over 98%
- Reverse Polarity and Current Protection
- Built-In Overload and Thermal Protection
- Master/Slave Configuration Options
- Compatible with most Battery Systems
- Designed for Long Term Reliability
- Australian Made

The **CoolMax SRX** features over 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 record-breaking conversion efficiencies, intelligent thermal management, and state of the art MPPT tracking, the SRX is a key component of any high-quality DC-Coupled remote power system.

Optional Extras

- **BatterySense**
 - a. Remote Voltage and Battery Temperature Sensing for the CoolMax SRX.

General Specifications	
Parameter	Typical
Weight	5 kg
Dimensions (L x W x H)	432 x 192 x 89 mm
Enclosure Type	Indoor Type 1 / IP20
Mounting Method	Wall Mount Bracket
Input / Output Power Connectors	Screw Terminals (8 mm ² -> 42mm ²)

Characteristics	SRX 600/30-120
Nominal Battery Voltage / Vdc Range	120 V / 90 -170
Max Charge Current	30 A
Nominal Charge Power	4320 W @ 120V
Max PV Input Voltage	600 V
Max PV Input Current	12 A
Max PV Short Circuit Current	18 A
Startup Voltage	24 V
MPP Voltage Range	215 – 540 V
Total Backfeed Current (I _{bf} Total)	0 A
Overload Behavior	Operating Point Shift (Power Limitation)
PV Reverse Polarity Protection	Yes
Earth Leakage Current Detection	Yes
Overvoltage Category	DC II
Overvoltage Protection	DC Type II
Safety Protection Class	I
Pollution Degree (Internal)	I
Pollution Degree (External)	III
Max Conversion Efficiency	98.7%
Ambient Operating Temperature Range (Full Rating up to 80% Ambient ° C)	-20 to +50 °C
Storage Temperature	-30 to +70 °C
Self-Consumption @ Night	2 W
Allowable Relative Humidity	4 – 95% (Non-Condensing)
Cooling Method	Active (User Serviceable)
Display	Indication LED Strip
Required Cabinet Air Exchange Rate (Intake @ 40°C)	14 m ³ /hour
Communications	RS485 / CAN Bus
Certifications	IEC62109-1:2010 EN61000.6.3:2012 EN61000.6.4:2012