

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
- 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 600/55-48	SRX 600/70-48
Nominal Battery Voltage / Vdc Range	24 V / 18 - 30 48 V / 40 - 60	24 V / 18 - 30 48 V / 40 - 60
Max Charge Current	55 A	70 A
Nominal Charge Power	1584 W @ 24 V 3168 W @ 48 V	2016 W @ 24 V 4032 W @ 48 V
Max PV Input Voltage	600 V	600 V
Max PV Input Current	12 A	12 A
Max PV Short Circuit Current	18 A	18 A
Startup Voltage	24 V	24 V
MPP Voltage Range	170 – 540 V	170 – 540 V
Total Backfeed Current (I _{bf} Total)	0 A	0 A
Overload Behavior	Power Limitation	Power Limitation
PV Reverse Polarity Protection	Yes	Yes
Earth Leakage Current Detection	Yes	Yes
Overvoltage Category	DC II	DC II
Overvoltage Protection	DC Type II	DC Type II
Safety Protection Class	I	I
Pollution Degree (Internal)	I	I
Pollution Degree (External)	III	III
Max Conversion Efficiency	97.2%	98.5%
Ambient Operating Temperature Range (Full Rating up to 80% Ambient °C)	-20 to +50 °C	-20 to +50 °C
Storage Temperature	-30 to +70 °C	-30 to +70 °C
Self-Consumption @ Night	2 W	2 W
Allowable Relative Humidity	4 – 95% (Non-Condensing)	4 – 95% (Non-Condensing)
Cooling Method	Active (User Serviceable)	Active (User Serviceable)
Display	Indication LED Strip	Indication LED Strip
Required Cabinet Air Exchange Rate (Intake @ 40°C)	14 m ³ /hour	14 m ³ /hour
Communications	RS485 / CAN Bus	RS485 / CAN Bus
Certifications	IEC62109-1:2010 EN61000.6.3:2012 EN61000.6.4:2012	IEC62109-1:2010 EN61000.6.3:2012 EN61000.6.4:2012