CoolMax SRX Charge Controller

Maximum Power Point Tracker (MPPT)

The **CoolMax SRX** features over thirty years of AERL's MPPT and Battery Charging 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 power system.

Product Highlights

- High Input Voltage for Ease of Install
- On-Board Ground Fault Detection
- PV Array Oversizing Support (+33%)
- Compatible with most Battery Systems
- Reverse Polarity and Current Protection
- Built-In Overload and Thermal Protection
- Designed for Long Term Reliability
- Australian Made

Australian Energy Research Laboratories
2/75 Bluestone Circuit,
Seventeen Mile Rocks, QLD, AU
Tel: +61 1800 950 865
sales@aerl.com.au

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General Specifications	
Parameter	Typical
Weight	5.65 kg
Dimensions (H x W x D)	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 Power	Nominal Charge Power x 1.33	Nominal Charge Power x 1.33
Max PV Input Voltage (Voc)	600 V	600 V
MPP Voltage Range (Vmp)	170 – 500 V	170 – 500 V
Min PV Operating Voltage	100 V	100 V
Max PV Input Current (Imp)	12 A	12 A
Max PV Short Circuit Current (Isc)	18 A	18 A
Device Startup Voltage	24 V	24 V
Total Backfeed Current (Ibf 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 (Int & Ext)	III	III
Max Altitude Rating	2000m	2000m
Max Conversion Efficiency	96.2%	96.2%
Ambient Operating Temperate Range (*Maximum Charge Current* derates by up to 10% Per ° C above 80% Ambient ° C)	-20 to +50 °C	-20 to +50 °C
Storage Temperature	-30 to +70 °C	-30 to +70 °C
Self-Consumption @ Idle	3 W	3 W
Allowable Relative Humidity	4 – 95% (Non-Condensing)	4 – 95% (Non-Condensing)
Cooling Method	Active (User Serviceable)	Active (User Serviceable)

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