

CoolMax SRX

Charge Controller

Maximum Power Point Tracking (MPPT)



Why choose the CoolMax?

- High Input Voltages for Ease of Install
- Superior Peak Power Efficiency – Over 98%
- PV Array Oversizing Support (+40%)
- Reverse Polarity and Current Protection
- Built-In Overload and Thermal Protection
- Designed for Long Term Reliability
- Master/ Slave Configuration Options
- Interactive Touch Screen Configuration
- Smart Multi-Stage Battery Charging
- Compatible with most Battery Systems
- Compliant with IEC62109-1

MV Models

- SRXMV 300/60
- SRXMV 300/50

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.

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

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.

General Specifications	
Parameter	Typical
Weight	6.8 kg
Dimensions (L x W x H)	480 x 226 x 111 mm
Enclosure Type	Indoor Type1 / IP20
Input / Output Power Connectors	Screw Terminals (8 mm ² -> 42mm ²)

Characteristics	SRXMV 300/50	SRXMV 300/60
Nominal Battery Voltage - Selectable	24V 36V 48V 60V	24V 36V 48V 60V
Maximum Charge Current	50A	60A
Recommended PV Array	3600W @ 60Vnom 3000W @ 48Vnom 2200W @ 36Vnom 1500W @ 24Vnom	4300W @ 60Vnom 3500W @ 48Vnom 2600W @ 36Vnom 1700W @ 24Vnom
Maximum PV Short Circuit Current	32A	32A
Maximum PV Voltage Open Circuit	300Voc (coldest)	300Voc (coldest)
Minimum PV MP Voltage	1.3 * Vnom	1.3 * Vnom
Maximum Conversion Efficiency	98.3%	98.3%
Overload Behavior	Operating Point Shift (Power Limitation)	Operating Point Shift (Power Limitation)
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	100mA @ 20V
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 ³ /hour	40m ³ /hour
Heatsink Temperature @ Full Power	30°C Rise	35°C Rise
Sealed Inductors & Internal Conformal Coating	Yes	Yes
Conforms to	IEC 62109-1 RoHS CE & CTick	IEC 62109-1 RoHS CE & CTick
Languages Available	English	English

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