

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 IEC 62109-1

HV Models

- SRXHV 300/40
- SRXHV 300/30

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 (3-10 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 Type 1 / IP20
Input / Output Power Connectors	Screw Terminals (8 mm ² -> 42mm ²)

Characteristics	SRXHV 300/30	SRXHV 300/40
Nominal Battery Voltage / Vdc Range	120 V / 90 - 170	120 V / 90 - 170
Maximum Charge Current	30 A	40 A
Nominal PV Power	4320 W @ 120 Vnom	5760 W @ 120 Vnom
Maximum PV Short Circuit Current	25 A	32 A
Maximum PV Voltage Open Circuit	300 Voc (Coldest)	300 Voc (Coldest)
Minimum PV MP Voltage	1.3 * Vnom	1.3 * Vnom
Maximum Conversion Efficiency	98.7%	98.7%
Overload Behavior	Operating Point Shift (Power Limitation)	Operating Point Shift (Power Limitation)
Battery Temperature Compensation	Yes	Yes
Remote Temperature Sensor Option	Yes	Yes
Ambient Operating Temperature Range <i>(Full Rated Output up to 80% Ambient ° C)</i>	-20 to 60 °C	-20 to 60 °C
Storage Temperature	-30 to 70 °C	-30 to 70 °C
Self-Consumption (Idle)	100 mA @ 20 V	100 mA @ 20 V
Communications Protocols	CANbus & RS485	CANbus & RS485
Communications Ports	RJ45 & USB (Mini B)	RJ45 & USB (Mini B)
Required Cabinet Air Exchange Rate (Intake @ 40°C)	18 m ³ /hour	20 m ³ /hour
Heatsink Temperature @ Full Power	30°C Rise	35°C Rise
Sealed Inductors & Conformal Coating	Yes	Yes
Conforms to	IEC 62109-1 EN 61000.6.3:2012 EN 61000.6.4:2012	IEC 62109-1 EN 61000.6.3:2012 EN 61000.6.4:2012
Warranty	3 – 5 Years (Conditions Apply)	3 – 5 Years (Conditions Apply)

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