

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

- SRXMV 300/50
- SRXMV 300/60

Optional Extras

- **EG-300 (Ground Fault Detection)**
 - a. Adds external Ground Fault Detection for (+/-) floating systems.
- **Remote Temperature Sensor (3-10 Metres)**
 - a. Allows for utilization of the CoolMax Battery Temperature Compensation.

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.

| 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 | SRXMV 300/50 | SRXMV 300/60 |
|---|---|---|
| Nominal Battery Voltage / Vdc Range | 24 V 48 V / 20 - 60 | 24 V 48 V / 20 - 60 |
| Maximum Charge Current | 50 A | 60 A |
| Nominal PV Power | 2880 W @ 48 Vnom 1440 W @ 24 Vnom | 3456 W @ 48 Vnom 1728 W @ 24 Vnom |
| Maximum PV Short Circuit Current | 32 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 | 98.3% | 98.3% |
| 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 (Full Rated Output up to 80% Ambient °C) | -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) | 14 m ³ /hour | 16 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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