

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 (+30%)
- 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 |