

RIPEENERGY The Power Conversion Company

COOLMAX CHARGE CONTROLLER

SERIES COOLMAX SRMVW

The COOLMAX SR is a high efficiency, buck only, common positive Maximum Power Point Tracker (MPPT).

It is the latest development in the AERL MAXIMIZER™ Range.

The COOLMAX SR blends the famously reliable AERL power stage with easy to use digital features such as system performance logging, fully configurable alarms and remote system monitoring and control.

The COOLMAX SR employs a maximum power point tracking strategy which has been proven to be highly robust, resistant to local extremes, and results in power losses of less than 0.5% over the whole operating temperature range of a PV Array.

HF













Convection cooled

APPLICATIONS

- Powerstations for remote areas
- Marine & other rugged environments
- Electric Utilities and Substations
- Base Station Power
- Industrial Controls
- Mobile military applications
- Telecom Power Plants

FEATURES

- Above 99% Ultra High Peak Power Conversion Efficiencies
- Super Cool Operation due to ultra-low loss, high efficient thermal design
- Primary Cooling by Passive Heatsink Convection for long term reliability
- Premium quality and quiet operation back-up cooling fans for extreme temperatures
- Higher input voltage for lower install cost
- Superior power advantage and MPPT response
- Common Positive wiring configuration
- Synchronous Rectification
- Front Panel Programmability
- Interactive TFT Colour Touch Screen LCD Display
- Smart Multi-Stage Battery Charging Profile (Bulk, Absorption and Float Stages)
- Support for Active Battery Temperature Compensation
- Adjustable for all types of solar cells and battery arrays
- Overload Protection
- On-board input and output surge protection
- Over-voltage and Over-current Shutdown Protection
- Support for low battery alarm or automatic low battery switch off circuit
- High and Low Battery Voltage Protection
- Auxiliary Alarm/Genset Relay Output
- Manual Reset Button

SPECIFICATIONS

	COOLMAX SRMVW
Nominal Battery Voltage-Selectable	24 to 84V
Maximum Output Current	60A
Maximum Recommended PV Array	5000W @ 84Vout(nom) 3800W @ 60Vout(nom) 3000W @48Vout (nom) 1500W @ 24Vout(nom)
Maximum PV Voltage Open Circuit	180V
Power Conversion Efficiency	99+%
Battery Temperature Compensation	Yes
Ambient Operating Temperature Range	-20°to 50°+C
Remote Temperature SensorOption	Yes
Storage Temperature	-30°to 70°C
Self Consumption	100mA @ 20V
Communication Protocol Options	Modbus RTU
Communication Ports	RS485 & USB
Required cabinet air exchange rate (intake at 40°C)	40 m ³ /hour
Operating temperature of heatsink at full rated power	35°C temperature rise
Sealed Inductors and conformally coated circuit boards	Yes
Gold plated contacts and connectors	Yes
Cable entry conduit diameter	40mm
High power wire size	16mm ² Max
Enclosure type	Indoor Type1/ IP20
Weight	3.7kg
Outer dimensions (L x W x H)	356 x 133x 104 mm
Certifications	CE & CTick RoHS Compliant Manufactured in a cert ISO 9001 facility
Languages (other language updates to come)	English

