



## Solar Charge Controller

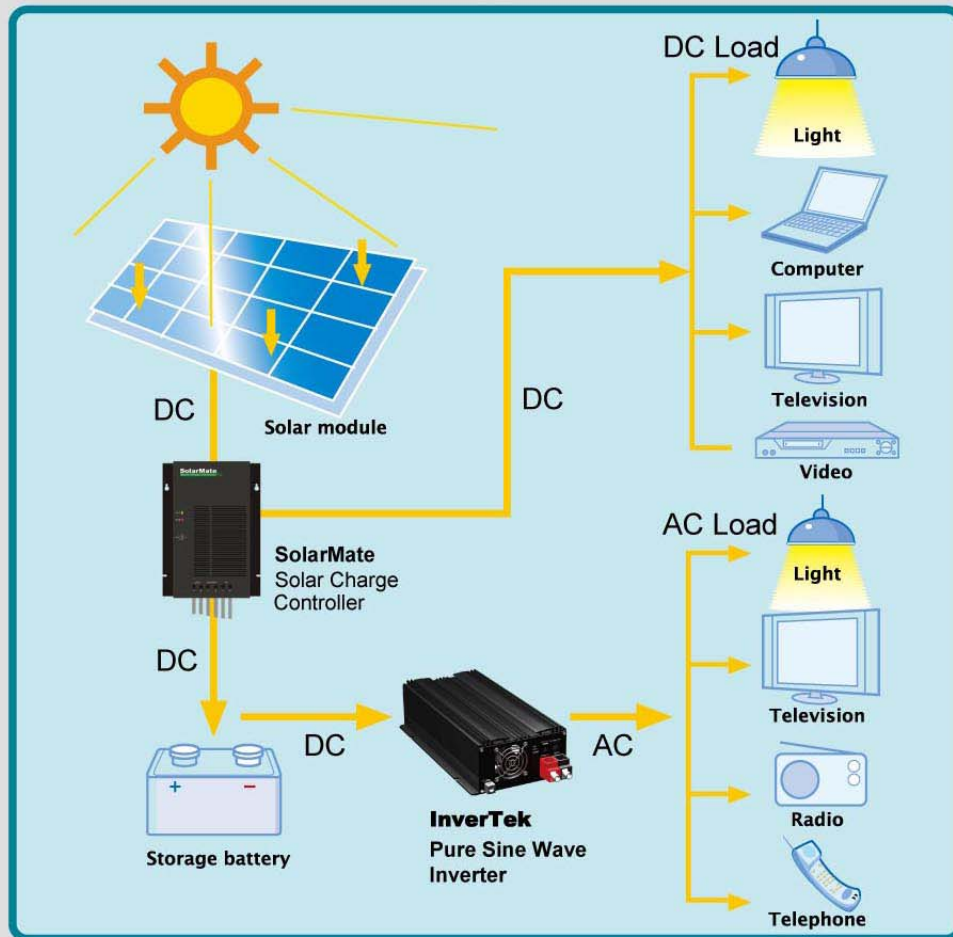
# SOLARMATE

### 12V/24V Solar Charge Controller with Advanced MPPT Technology

Adopting advanced MPPT technology, SolarMate photovoltaic charge controller is the key component in off-grid or stand alone solar power generation system. SolarMate can track the maximum power point and transfer the energy to various types of batteries. The build-in MPPT microprocessor enables SolarMate to increase the charging current up to 30% compared to traditional charge controllers. Easy installation and capable of paralleled connection, SolarMate is perfect solution for home to large solar system applications.

- High converting efficiency higher than 97% for minimizing energy loss
- Build-in MPPT tracker for optimizing the power transformation
- Reversed current protection for preventing equipment damage
- Automatic battery temperature compensation for long-term reliability
- Capable of selecting different charging mode for various type of batteries
- Capable of connecting additional DC load for wider applications
- Three stage charge control system (bulk, absorption, and float mode) with temperature compensation
- LED indicators display charge status in real time
- Pulse Width Modulation (PWM) topology combined with a multi-stage charge control algorithm leads to superior charging and enhanced battery performance

## ● Off Grid Solar System Application



## ● SolarMate Solar Charge Controller Specification

MODEL	SolarMate
VOLTAGE CONFIGURATIONs	12 and 24Vdc Auto-Detection
RATED CHARGING CURRENT	40 Amp
RATED LOAD CURRENT	15 Amp
MAX. PV OPEN VOLTAGE	55Vdc
TYPICAL IDLE POWER	<10mA
BULK CHARGE	14.6Vdc / 29.2Vdc
FLOATING VOLTAGE	13.4Vdc / 26.8Vdc
EQUALIZATION VOLTAGE	14.0Vdc / 28.0Vdc
OVER CHARGING PROTECTION	14.8Vdc / 29.6Vdc
LEAD ACID BATTERY SETTINGS	Adjustable
NICAD BATTERY SETTING	Adjustable
LOAD CONTROL MODE	1. Low Voltage Reconnect (LVR): Adjustable 2. Low Voltage Disconnect (LVD): Automatic disconnection
OPERATING TEMPERATURE	0-40°C (De-Rating at 40~60°C)
OPERATING ALTITUDE	5000 Meters
CHASSIS LEVEL	IP21
RECOMMENDED WIRE SIZE	#8 AWG
COOLING	NATURAL COOLING
BATTERY TEMPERATURE SENSOR	OPTIONAL
DIMENSION (DxWxH)	192 x 140 x 66 mm