

REKOSER

SOLAR CONTROLLERS

CATALOG 2019

RSC-P PWM Solar Charge Controller

Feature:

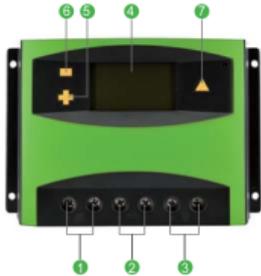
- 10A 20A 30A 50A 60A solar charge controller
- Vivid LCD graphic symbols
- Simple button operation
- Automatic identification of system voltage level
- Intelligent PWM charging mode
- Adjustable charge-discharge protection
- Automatic temperature compensation
- Settable operation mode of load
- Battery reverse-discharge protection
- Battery low voltage disconnection(LVD)
- Battery reverse connection protection
- Over current protection
- USB output



Introduction:

This intelligent, multi-purpose solar charge and discharge controller from Rekoser has a very friendly interface of fixed LCD display. Various control parameters can be flexibly set, fully meet your various application requirements.

LCD Display Information



Inner Details



Stability, high efficiency, high integration



Optimized circuit design



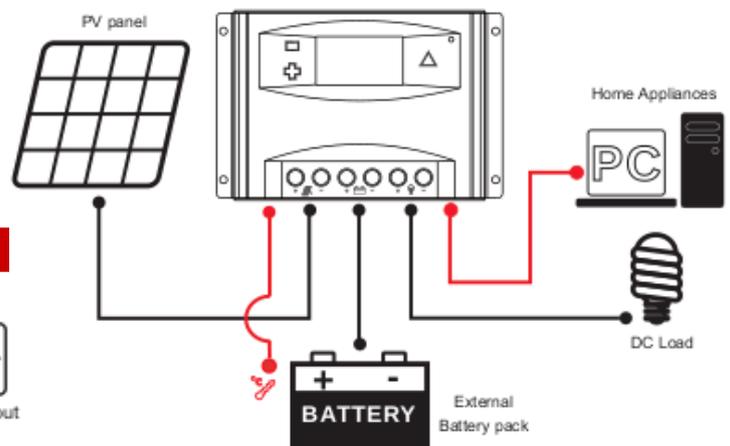
SCM accurate control



Selection of quality materials

Button	Operation	Function
5. +	Short press	Next display page; Increase when setting parameters
	Long press (≥3 s)	Increase value continuously when setting parameters
6. -	Short press	Previous display page; Decrease when setting parameters
	Long press (≥3 s)	Reduce value continuously when setting parameters
7. ▲	Short press	Switch on/off load ; Enter setup/save parameters
	Long press (≥3 s)	Access/exit secondary loop interface

Solar System Connection



Functions



LCD display



12V / 24V Auto



PWM



Simple button operation



Protections



USB Output

SERIES Controllers



Model: RSC1224-20PU



Rated Voltage: 12V24V Auto identified
Rated Current: 20A
USB Port: 5V, 1A x 2

Packing info: 30pcs / carton
Carton size: 535mm x 425mm x 200mm
Gross weight: 12Kg
Volume: 0.045m³



Model: RSC1224-30PU



Rated Voltage: 12V24V Auto identified
Rated Current: 30A
USB Port: 5V, 1A x 2
LCD screen size: 2.2"

Packing info: 30pcs / carton
Carton size: 535mm x 425mm x 200mm
Gross weight: 12Kg
Volume: 0.045m³



Model: RSC1224-40P, 50P

Rated Voltage: 12V24V
Rated Current: 40A, 50A

LCD screen size: 2.6"
Temperature sensor port: x1
Communication port: RJ45 (Optional)

Packing info: 24pcs / carton
Carton size: 545mm x 425mm x 205mm
Gross weight: 14Kg
Volume: 0.047m³



Model: RSC1224-60P

Rated Voltage: 12V24V
Rated Current: 60A

LCD screen size: 2.6"
Temperature sensor port: x1
Communication port: RJ45 (Optional)

Packing info: 24pcs / carton
Carton size: 545mm x 425mm x 205mm
Gross weight: 17Kg
Volume: 0.047m³

Application



RV, boat & field power supply solar system



Off-grid home solar system



Farm solar generation system

SPECIFICATION

MODEL		RSC1224-40P, 50P		RSC1224-60P		RSC48-50P		RSC48-60P	
INPUT	PV voltage	≤50V							
	Rated current	40A	50A	60A	40A	50A	60A	≤100V	
OUTPUT	System voltage	12/24V Auto				48V			
	High voltage disconnection	16.00V x 1/ x 2/ x 3/ x 4 (0.5V)							
	Rated discharging current	40A	50A	60A	40A	50A	60A		
	No load loss	≤13mA				≤25mA			
	Charge loop voltage drop	≤0.21V		≤0.24V		≤0.25V		≤0.25V	
	Discharge loop voltage drop	≤0.12V		≤0.10V		≤0.12V		≤0.10V	
	Charging mode	PWM 4-stage bulk, absorption, float, equalized							
	Float charging voltage	13.8V (13V~15V) x 1/ x 2/ x 3/ x 4							
	Absorption charging voltage	14.4V (13V~15V) x 1/ x 2/ x 3/ x 4							
	Equalized charging voltage	14.6V (13V~15.5V) x 1/ x 2/ x 3/ x 4							
OTHER	Low voltage protection	10.7V (10V~14V) x 1/ x 2/ x 3/ x 4							
	Low voltage reconnecting	12.6V (10V~14V) x 1/ x 2/ x 3/ x 4							
	USB output	5V, 1A				None			
	Installing cables size	≤6mm ²		≤16mm ²		≤6mm ²		≤16mm ²	
	Working temperature	-20°C~55°C							
	Dimension(L x W x H)	188mm x 95mm x 46.5mm							
Net weight	355g		360g		355g		360g		

*Product specifications are subject to change without further notice.

RSC Series MPPT Solar Charge Controller

Feature:

- 20A/30A/40A/45A/60A/80A MPPT Solar charge controller
- 12V/24V auto work / 12V/24V/36V/48V auto work
- MPPT efficiency >99%, Peak conversion efficiency >98%
- DSP processors architecture ensures high speed and performance
- Multi-stage charging mode
- Protection: PV array short circuit, PV reverse polarity, Battery reverse polarity, Over charging, Output short circuit

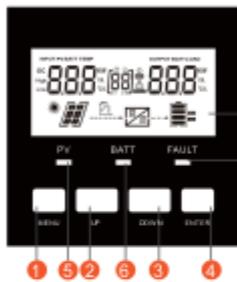


Introduction:

MPPT (Maximum Power Point Tracking) Solar Charge Controller offer an efficient, safe, multi-stage recharging process that prolongs battery life and assures peak performance from a solar array. Each Charge Controller allows customized battery recharging.

LCD Display Information

Solar System Connection



1. MENU: Enter or exit setting mode.
2. UP: Increase the setting data.
3. DOWN: Decrease the setting data.
4. ENTER: Confirm the selection in setting mode.
8. LCD display

LED indicator		System status	
5. PV	Green	On	PV voltage normal
		Flashing every 1s	PV fault is recovering
		Flashing every 2s	PV fault can't recover
6. BATT	Yellow	On	Battery voltage normal
		Flashing every 1s	Battery fault is recovering
		Flashing every 2s	Battery fault can't recover
7. FAULT	Red	Flashing	Fault
		Off	Normal

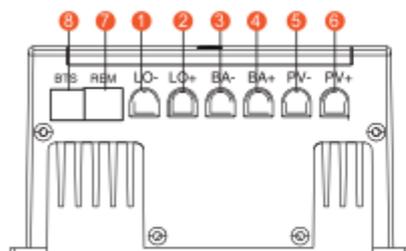
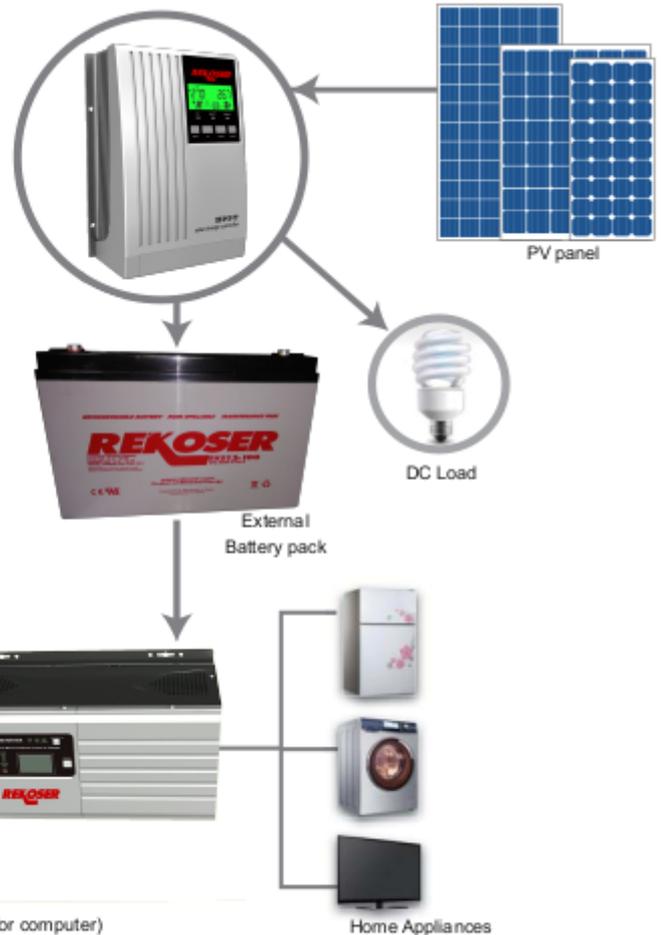


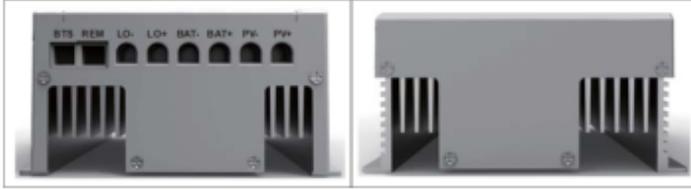
Figure 1 Charge Controller wiring compartment marks

1. LO-: The load negative terminal
2. LO+: The load positive terminal
3. BA-: The battery negative terminal
4. BA+: The battery positive terminal
5. PV-: PV array negative terminal
6. PV+: PV array positive terminal
7. REM: RS485 Communication network terminal(Use for computer)
8. BTS: Battery Remote Temperature sensor terminal



Back Panel RSC1224-20/30/40

Back Panel RSC1248-45/60



SPECIFICATION

MODEL		RSC1224-20	RSC1224-30	RSC1224-40	RSC1248-45	RSC1248-60	RSC1248-80
Nominal Battery System Voltage (Auto detection)		12VDC/24VDC			12VDC/24VDC/36VDC/48VDC		
CONTROLLER INPUT	PV Open Circuit Voltage	100VDC@12V/ 145VDC @24V			100VDC@12V/ 145VDC @24V/ 145VDC @36V/ 145VDC @48V		
	PV Array MPPT Voltage Range	16VDC~100VDC / 32VDC~130VDC			16~100VDC / 32~130VDC / 48~130VDC / 64~130VDC		
	Max PV Input Power(12V/24V)	300W/600W	450W/900W	600W/1200W	600W/1200W	800W/1600W	1050W/2100W
	Max PV Input Power(36V/48V)				1800W/2400W	2400W/3200W	3150W/4200W
BATTERY	Absorption Voltage	12.5VDC/25.0 VDC			12.5VDC/25.0VDC/37.5VDC/50.0VDC		
	Refloat Voltage	13.7VDC/27.4 VDC			13.7VDC/27.4VDC/41.1VDC/54.8VDC		
	Float Voltage	14.3VDC/28.6 VDC			14.3VDC/28.6VDC/42.9VDC/57.2VDC		
	Low Voltage Protection Point	10.0VDC/20.0 VDC			10VDC/20VDC/30VDC/40VDC		
DC OUTPUT	Output Voltage	10.0~14.5VDC /20.0~29.0VDC			11.0VDC/20.0VDC/30.0VDC/40.0VDC		
	Peak Conversion efficiency	98% (MPPT Efficiency 99%)					
	Max Charging Current	20A	30A	40A	45A	60A	80A
	Max Output Current	20A			45A	60A	80A
	Low voltage alarm	10.25VDC/20.5 VDC			10.25VDC/20.5 VDC/30.75VDC/46.0VDC		
	Low voltage cutoff	10.0VDC/20.0 VDC			10.0VDC/20.0 VDC/30.0VDC/42.0VDC		
	Low voltage recovery	11.0VDC/22.0 VDC			11.0VDC/22.0 VDC/33.0VDC/46.0VDC		
GENERAL SPECIFICATION	Radiating mode	Fan cooling					
DISPLAY & PROTECTION	LED indication	Systematic operation, LV indication, LV protection, over charge protection, loads protection, short circuit protection					
	LCD display	Charge voltage, charge current, voltage of storage battery, capacity of storage battery, output current					
	Alarm Protections	PV array short circuit, PV reverse polarity					
		Battery reverse polarity, Over charging protection					
		Output short circuit protection					
Low voltage protection for storage battery							
MECHANICAL SPECIFICATIONS	Mounting	Wall mount					
	Machine Dimension(W*H* D)	154*236*88mm(Color box / pcs)			167.6*257.2*82.9mm (per pcs)		
	Gross Wight(Kg) (per pcs)	2.5Kg			3Kg/pcs		
	Package Dimension(W*H* D)	610*308*230mm (4PCS/Carton)			612*308.2*235.6mm (5pcs/Carton)		
	Gross Weight(Kg) (per Carton)	10.8Kg	13.4Kg		19Kg		
OTHER	Environmental Rating	Indoor					
	Operation Temperature Range	-25~+55°C					
	Ambient humidity	0~90% relative humidity(non-condensing)					
	Altitude	≤ 3000 m					
	Loading(20GP/40GP/40HQ)	2500pcs / 5000pcs / 5800pcs			3000pcs / 6000pcs / 7200pcs		

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