MPPT 20 - 30A HQ
SOLAR CHARGE CONTROLLER

WORLD KEY ENERGY

This is a solar charge controller 20A ~30A that have automatic max. power point tracking function with high efficiency that almost 30%~60% higher than traditional charge controller. It also features the functions of system voltage auto recognition, wide rang of PV input, charge for all kinds of battery, automatic discharge control, RS 232 / LAN communication function and so on.
It is very high-end product for solar market.

Features

- MPPT charge mode,conversion efficiency up to 99%
- 12V/24V/48V system auto recognize
- Wide range of PV input with max is DC150V
- Memory function, Save setting function: date, time, generating capacity record and so on
- Selected battery types: sealed lead acid, vented, gel, NiCd battery. Other types of the batteries can also be defined.
- RS232 and LAN communication port. IP and Gate address could be user define it satisfy global area. Communication protocol can be provided to manage all information.
- 2 years warranty. The service life is designed to use for 10 years. Extended 3~10
- Display Led/Lcd

Other Parameters

Noise	≤40dB
Thermal methods	Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop when controller stop working, fan also stop ran.
Environment Protection	World brand raw materials. Compliance with EU standards. Meet the 2002/95/EC without cadmium hydride, fluoride, peculiar smell and toxic substances.All rated temperature of electrolytic capacitors not less than 105°C
Short Circuit Protection	Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit

For Input Low Voltage Protection, Input Overvoltage Protection, Input Polarity Reversal Protection, Output Overvoltage Protection and Output Polarity Reversal Protection, Check the in/output characteristics.

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TECHNICAL SPECIFICATION		20A		30A
Charge Mode		Maximum Power Point Tracking		
Discharge Mode		Intelligent control		
System Type		12V 24V 48V Automatic recognition		
Soft Start Time		≤10S		
Dynamic Response Recovery Time		500us		
Conversion Efficiency		≥96.5%,≤99%		
PV Modules Utilization Rate		≥99%		
INPUT CHARACTERISTICS				
MPPT Working Voltage and Range	12V system	DC17V~DC150V		
	24V system	DC34V~DC150V		
	48V system	DC65V~DC150V		
	96V system	DC120V~DC300V		
Max. DC Voltage		Max. DC Voltage DC160V		
Input Overvoltage Protection Point		DC150		
Max. PV Power	12V system	280W		450W
	24V system	560W		850W
	48V system	1120W		1700W
	96V system	2240W		3400W
CHARGE CHARACTERISTICS				
Selectable Battery Types		Sealed lead acid, vented, Gel, NiCd battery (Default type is GEL battery)		
Other types of Battery Setting		Constant charge Floating charge		User-defined constant/floating charge voltage range between DC10V~DC15 (based on 1 pcs 12V battery)
Battery Type Setting		12V/24V/48V SYS		Controller and upper monitor
Charge Type		12V/24V/48V SYS		Three Stages: Fast charge/Constant charge/Floating charge
Rated Output Current		20A		30A
Current-limiting Protection		25A		35A
Output Ripples(peak)		200mV		
Output Voltage Stability Precision		≤±1.5%		
Charge voltage Peak-Peak Ripple		200mV		
Charger voltage accuracy		≤±1.5%		
DISCHARGE CHARACTERISTICS				
Setting Control		Controller or LAN		
Max discharge current			30A	
Max discharge power		420W	840W	1680W
Discharge protection		fuse 40A*2		
Double-time control		On in morning, off in morning / On in night, off in night		
Discharge voltage protection		Output off when it under setting voltage Factory set is 10.5 (Note: set based on 1 battery)		
COMMUNICATION PORT				
RS232 Communication		Chose COM communication		
LAN Communication		Set IP and Gate address for controller and solar eagle Then chose TCP communication		
PHYSICAL				
Measurement DxWxH (mm)		270*185*90		
Safety		CE, RoHS, PSE,FCC		
EMC		EN61000		
Type of Mechanical Protection		IP21		
ENVIRONMENT				
Humidity		0~90%RH (no condense)		
Altitude		0~3000m		
Operating Temperature		-20°C ~ +40°C		
Storage Temperature		-40°C ~ +75°C		
Atmospheric Pressure		70~106kPa		

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