WISER series adopted with auto cool, high conversion efficiency, LCD display and free PC software. It features an efficient <u>MPPT controlller</u> algorithm to track the maximum power point of the PV array in any environment. Greatly improve the utilization of solar panel. Also added the output function(USB 5V 3A). For the <u>mppt controller</u> can be widely used in off-grid solar system, Communication base station solar system, household solar systems, street light solar systems, field monitoring and other fields.



### Features

1. It has an efficient MPPT algorithm, MPPT efficiency  $\geq$  99.5% and converter efficiency up to 98%

2.Charge mode: three stages (constant current, constant voltage, floating charge), it prolongs service life of the batteries.

3.Four types of load mode selection: ON/OFF, PV voltage control, Dual Time control, PV+Time control . 4.Battery system voltage automatic recognition.

5. Three kinds of commonly used lead-acid battery (Seal\Gel\Flooded) parameter settings fcan be selected by the user, and the user can also customize the parameters for other battery charging.

6.Natural cooling design is adopted to improve the reliability of the product and prolong the service life of the product.

7. The input and output of all kinds of protection functions are complete to protect the system.

8. The use of high strength plastic shell design makes the shape beautiful, and the effective reduction of the product weight can save the transportation cost.

9.Equipped with 5V3A USB dual output power supply function, support mobile phone and tablet charging products etc..

10.It has a current limiting charging function. When the power of PV is too large, the controller automatically keeps the charging power, and the charging current will not exceed the rated value. 11.High definition LCD display function to check the device running data and working status, also can

support modify the controller display parameter.

12.RS485 communication, we can offer communication protocol to convenient user's integrated management and secondary development.

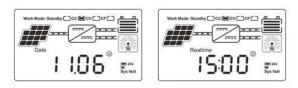
13.Support PC software monitoring and WiFi module to realize APP cloud monitoring.

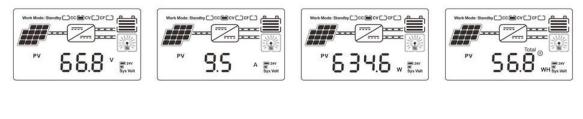
14.CE, RoHS, FCC certifications approved, we can assist clients to pass various certifications. 3 years warranty, and  $3\sim10$  years extended warranty service also can be provided

### **MPPT Controller connection diagram**

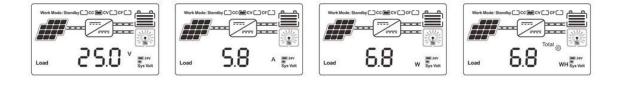


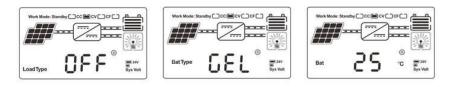
# **Parameters Display & Setting information**









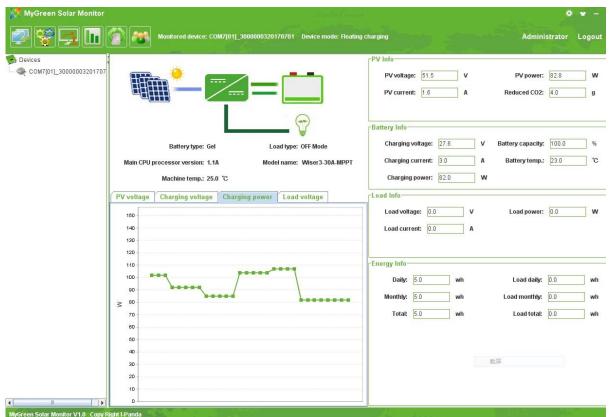


LCD display information



Set the battery type and LOAD control mode

# **Upper Computer Software and Test Software**



#### PC software\_SolarEagle

Visual display of charge and discharge status, PV voltage, charge voltage, charge current, and can set the battery type, LOAD output control;

#### Parameter

#### 

WIS	ER-series		40A
Product category	Controller Properties		MPPT (maximum power point tracking)
	MPPT efficiency		≥99.5%
	Standby power		0.5W~1.2W
	System voltage		Automatic recognition
	Heat-dissipating method		Intelligent fan cooling
Input	Max.PV input voltage(VOC)		DC150V
Characteristics	Start the charge voltage point		Battery voltage + 3V
	Low input voltage protecti on point		Battery voltage + 2V
	Over voltage protection point		DC150V
	Rated PV power[]	12V system	520W[][][
		24V system	1040W

Charge Characteristics	Selectable Battery Types	Sealed lead acid, Gel battery, Flooded
	(Default Gel battery)	(Other types of the batteries also can be defined)
	Charge rated current	40A
	Charging Method	3-Stage: constant current(fast charging)-constant voltage-floating charge
LOAD Characteristics	Load voltage	The same as the battery voltage
	Load rated current	50A
	Load control mode	On\Off mode, PV voltage control mode, Dual-time control mode, PV + Time control mode
Display & Communication	Display mode	High-definition LCD segment code backlight display
	Communication mode	8-pin RJ45 port/RS485/support PC software monitoring/
	mode	support WiFi module to realize APP cloud monitoring
	Protect function	Input-output over \ under voltage protection, Prevention of connection reverse protection,battery shedding protection etc.
	Operation Temperature	-20°C~+50°C
	Storage Temperature	-40°C~+75°C
	IP(Ingress protection)	IP43
	Max. connection size	30mm2
	Net Weight (kg)	1.65
	Gross Weight (kg)	1.95
	Product Size[]mm[]	243*155*80
	Packing Size(mm)	290*190*113

## Remark[]

1[Above is company's standard parameters; any modify]please check our official website; 2[]We can customize 72V / 96V and other unconventional MPPT controller to special customers, provide OEM and ODM services.