Introduction:

This is a Maximum Power Point Tracking(MPPT) function with high efficiency MPPT charge controller. It has many advantages such as self cooling, system voltage automatic recognition, wide rang of PV input,bcharge for all kinds of batteries, intelligent discharge control, RS232 / LAN communication function etc. It is the most high-end product in solar market.

Feature:

1.It has an efficient MPPT algorithm, MPPT efficiency ≥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.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.
7.Support multi - machine parallel to realize system power upgrade.
8.High definition LCD display function to check the device running data and working status, also can support modify the controller display parameter.
9.RS485 communication, we can offer communication protocol to convenient user’s integrated management and secondary development.
10.Support PC software monitoring and WiFi module to realize APP cloud monitoring.
11.CE, RoHS, FCC certifications approved, we can assist clients to pass various certifications.
12.3 years warranty, and 3~10 years extended warranty service also can be provided.

Parameter：

MASTER series		48BL-80A	48BH-80A
Product category	Controller Properties	MPPT (maximum power point tracking)	
	MPPT efficiency	≥99.5%	
	Standby power	0.5W~1.2W	
	System voltage	Automatic recognition	48V
	Heat-dissipating method	Air cooling	

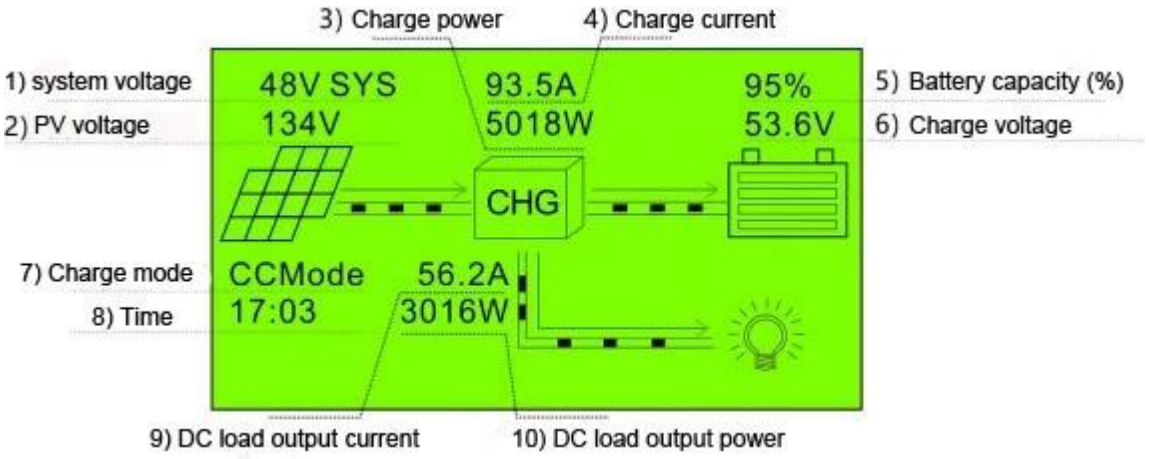
Input Characteristics	Max.PV input voltage(VOC)		DC150V	DC300V
	Start the charge voltage point		Battery voltage + 3V	Battery voltage + 10V
	Low input voltage protection point		Battery voltage + 2V	Battery voltage + 5V
	Over voltage protection point		DC150V	DC300V
	Rated PV power	12V system	1040W	□
		24V system	2080W	□
		36V system	3120W	□
		48V system	4160W	4160W
		96V system	□	□
Charge Characteristics	Selectable Battery Types(Default Gel battery)		Sealed lead acid, Gel battery, Flooded (Other types of the batteries also can be defined)	
	Charge rated current		80A	80A
	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		80A	80A
	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/support WiFi module to realize APP cloud monitoring	
Other Parameters	Protect function		Input-output over \ under voltage protection,Prevention of connection reverse protection,battery shedding protection etc.	
	Operation Temperature		-20℃~+50℃	
	Storage Temperature		-40℃~+75℃	
	IP(Ingress protection)		IP43	
	Max. connection size		50mm2	
	Net Weight (kg)		7.1	
	Gross Weight (kg)		8.8	
	Product Size□mm□		420*280*95	
	Packing Size(mm)		510*368*210	

Remark:Above is company's standard parameters;

Product Parts:

NO.	Quantity	Description
1	1PC	MPPT Solar controller（Blue,Green or White）
2	2 pc	hangers(To install the controller on the wall)
3	8 set	Screw(To keep the hangers into the controller)
4	1 pc	RJ45 turn to RS232 communication cable
5	1 pc	Temperature sensing wire
6	1 pc	CD
7	1 pc	User manual

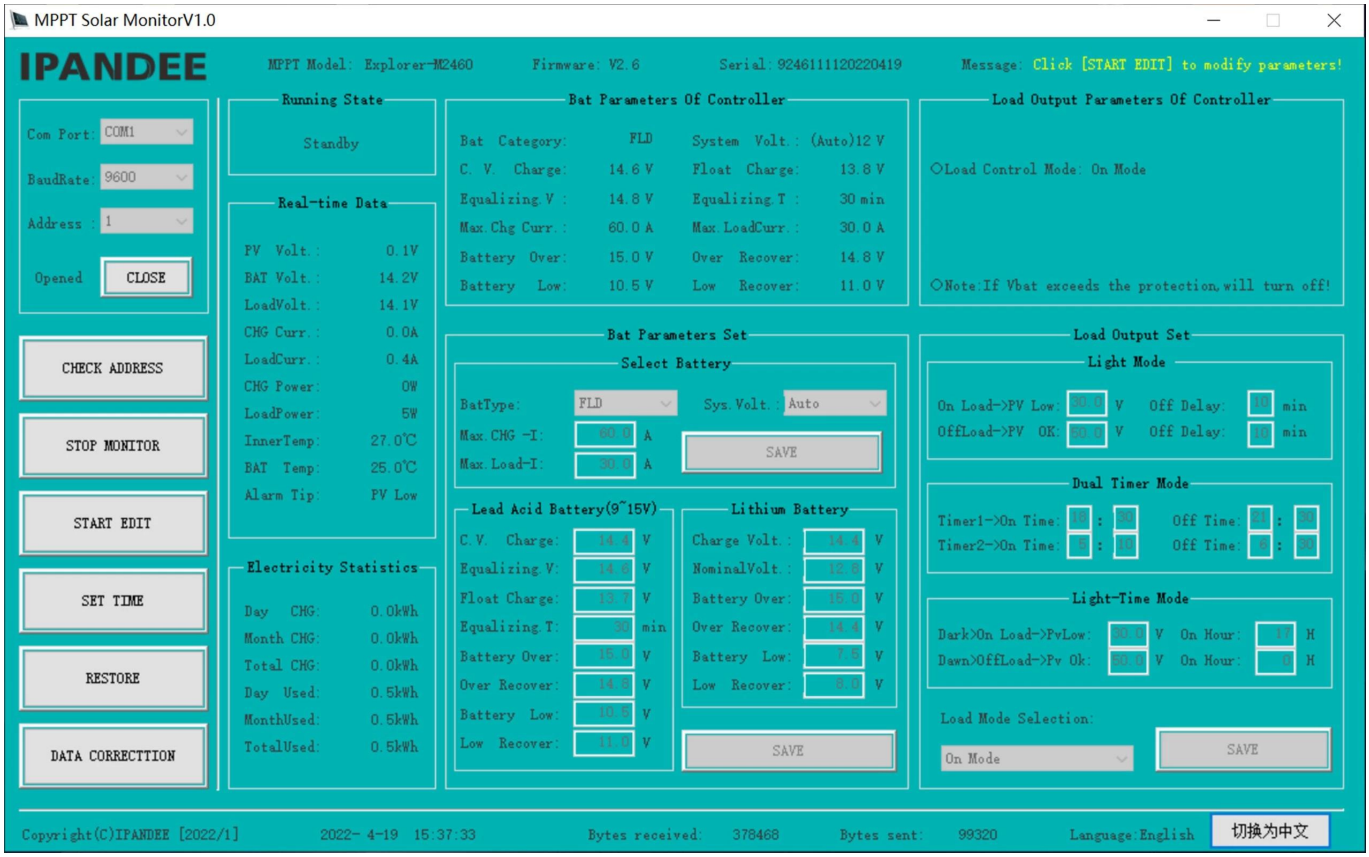
The Main Information of MPPT



Setting page

Note: All above information is asample which is the working state of MASTER in some time . In differentworking stage the parameters will change, like working mode , charge current,charge mode ,charge power and so on ; In the fault mode it will show faultmode ;

Upper Computer Software and Test Software



The interface of upper computer software working state

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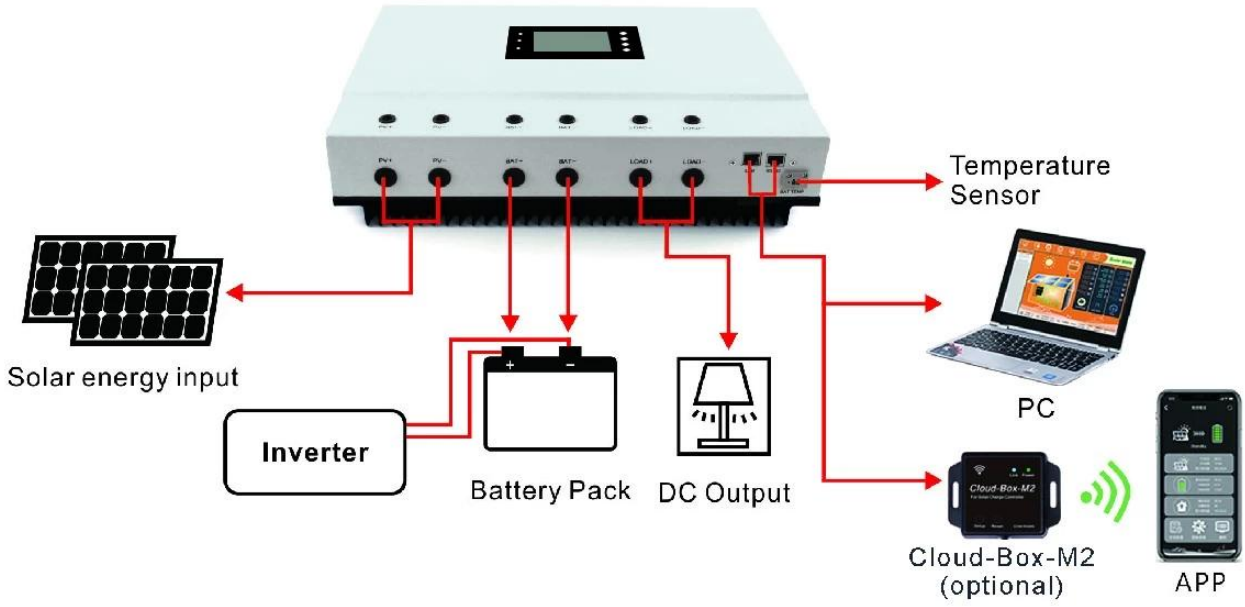

Parallel verbindingsschema