



IPANDEE

MPPT

Solar charge controller



Mars series

- ★ MPPT efficiency ≥99.5%
- ★ High definition LCD display
- ★ Suitable for all kinds of batteries
- ★ Support remote monitoring of PC and APP
- ★ Support dual RS485 communication
- ★ Self-heating & IP65 high waterproof level
- ★ Support parallel connection
- ★ CE/Rohs/FCC certifications approved
- ★ Multiple protection functions, overvoltage and overcurrent, etc

**Focus on the MPPT Solar Controller
More Professional, More Reliable**

Applicable scenarios



Off grid power system



communication base station



Energy storage system



Solar powered yacht

Product Size

Mars Series	MS48L80	MS48L100	MS48H80	MS48H100	MS96H51
Product Category					
MPPT efficiency	≥99.5%				
Standby power	—				
Heat-Dissipating method	Self cooling				
System voltage	Auto		48V	48V	96V
Input Characteristics					
Max.PV input voltage(Voc)	DC150V		DC300V		
Start-up charging voltage	Real-time battery voltage +3V		Real-time battery voltage10V		
Low input voltage protection	Real-time battery voltage +2V		Real-time battery voltage5V		
Over voltage protection / Recovery	DC150V		DC300V		
Rated PV Power	12V system	1040W	1300W	—	—
	24V system	2080W	2600W	—	—
	36V system	3120W	3900W	—	—
	48V system	4160W	5200W	4160W	5200W
	96V system	—	—	—	5200W
Charge Characteristics					
Battery types	Sealed(SEL),Gel(GEL),Flooded(FLD),User-defined(USER),Li-ion(LIT)				
Rated charge current	80A	100A	80A	100A	50A
Temperature compensation	-3mV/°C/2V				
Charge method	3 stages: CC (Constant current) - CV (Constant voltage) - CF (Floating charge)				
Output voltage stability accuracy	≤±0.2V				
LOAD Characteristics					
Load voltage	Same as battery voltage				
Rated load current	80A	100A	80A	100A	50A
Load control mode	On/Off , PV voltage control mode, Dual-time control mode, PV + Time control mode				
Low voltage protection	10.5V (default), 11V (restored), settable				
Setting method	PC software / APP / Controller				
Display & Communication					
Display	HD LCD backlight display				
Communication	Dual RJ45 port / RS485 / support PC software monitoring / support WiFi module for APP cloud monitoring / support centralized parallel monitoring				
Other Parameters					
Protections	Input & output over-volt / low-voltage protection, reverse polarity protection, over-heating protection, battery shedding protection etc.				
Operating ambient temperature	-20°C~+50°C				
Storage temperature	-40°C~+75°C				
IP(Ingress protection)	IP65				
Altitude	0~3000m				
Max. Witing size	50mm ²				
N.weight /G.weight (KG)	12.8/13				
Product size /Packing size (mm)	500x350x140/600x448x265				