

### **MSC Solar controller**



HES MSC Solar controller, truly MPPT technology, high-performance Buck solar power equipment, using MPPT (Maximum Power Point Tracking) algorithm makes full use of solar photovoltaic energy.

PV input voltage range, for a variety of battery charging, and three-stage charging effectively improve the battery life. The modular design of the controller, allowing customers configure flexible.

# Features

Industrial-grade materials

Memory function

Three-stage charging (constant current, constant voltage, float), LCD and LED display showing PV input, battery type, charging voltage, current, power, working status, etc.

Truly MPPT technology

Parallel Working match high-power charging.





#### **Protections**

PV array reverse

Battery reverse

Nighttime anti-charge

Battery overcharge

Output overload

Over temperature





Office / Power station

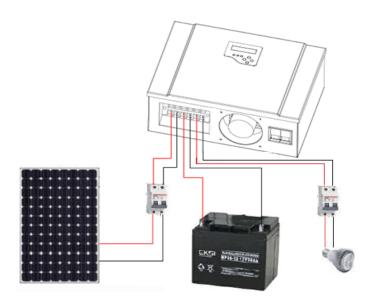


# Specification

Model	MSC48	MSC96	MSC192	MSC220	MSC240	MSC360
Rated voltage (VDC)	48	96	192	220	240	360
Over voltage value(VDC)	62.0	124.0	248.0	279.0	310.0	465
Over voltage recovery value(VDC)	60.0	120.0	240.0	270.0	300.0	450
Float charge Voltage(VDC) Bulk charge Settable	54.0	108.0	216.0	243.0	270.0	405
Voltage(VDC)	56.8	113.6	227.2	255.6	284.0	426
Maximum charging current (A)	60/120	50/100/150/200				40/80/120/160
Charging Mode	Three-stage: constant current(MPPT), bulk charge, float charge					
Rated input power (kWp)	3.4/6.8	5.7/11.4/	11.4/22.8/	12.8/25.6/	14.2/28.4/	17/34/51/68
		17.1/22.8	34.2/45.6	38.4/51.2	42.6/56.8	
Start work voltage(VDC)	60	120	240	270	300	430
MPPT voltage range (VDC)	50-150	110-280	230-450	260-450	290-450	410-620
Maximum input voltage (VDC)	170 300 480					760
Maximum efficiency	>98%					
MPPT efficiency	>99%					
Noise (dB)	<55					
Degree of protection	IP20					
Display	LCD+LED					
Communication	RS485(optional)					
Working temperature	-10~+50℃					
Relative humidity	0 to 95% (non-condensing)					
Altitude (m)	≤5000m, (1000 meters above derating)					
Degree of protection	IP20					
Dimensions (W × H × D mm)	400*280*160 400*280*160/440*685*440					



## **System Connection**



#### Note:

All the connection must be reliable, or may cause a fire or damage the machine etc.

No more 3 meters between battery and the controller wiring, otherwise, or will be wire.

Correct wiring please refer standard silk description.

All specific cations and information are given with good intent, errors are possible and products may be subject to change without notice. Pictures may differ from actual products depending on local market re-quirements and regulations. A solar power system consists of a controller, inverter and load end. Multiple controllers/inverters are shown to represent the wide range that HES has.