

## **HPC45-LCD**

Dynamic Solar Controller 12/24/48V, 45Amp

#### **FUNCTIONS FOR ELECTRIC PROTECTION**

- Overcharge protection
- Deep discharge protection
- Reverse current and polarity protection of load and any combination of solar module and battery
- Automatic electronic fuse
- Short circuit protection of load and module
- Overvoltage protection at module input
- Open circuit protection without battery
- Over temperature and overload protection
- Battery overvoltage shutdown



#### **OPERATION:**



SIMPLE MENU-DRIVEN OPERATION



BY BUTTONS

MANUAL LOAD SWITCH

## CHARACTERISTICS

- Latest technology high efficiency PWM charging for increased battery lifetime and solar system performance
- 32 bit MCU with high speed and high performance
- Special feature for solar outdoor lighting such as smart dusk to dawn and timer function
- Real time remote monitoring as well as load control mode and adjustments of parameter settings
- Advanced electromagnetic design
- Hi-tech LCD screen with user friendly interface for easy operating
- Complete graphical LCD display for complete menu and programmable operating parameters, fault messages, self-test etc.
- Mosfet as electronic switch without any mechanical switch
- 12 bit Analog-to-Digital (A/D) top-accuracy sampling for precision
- Nominal system voltage automatic recognition
- Suitable for the following battery types: GEL, Flooded and Sealed

#### **SYSTEM TERMINALS**

- All the terminals are inside of the controller
- 4 arrays terminals for solar panel
- 1 terminal for battery
- 1 terminal for load

- 1 9-pin tel. terminals, for computer or modem.
- 2 output for inverter signal, isolate the switch output signal.
- 2 input for inverter signal, isolate the switch input signal.
- 1 terminal for temperature sensor.











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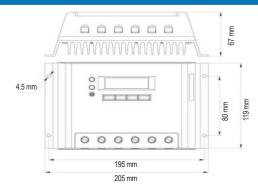
### **SPECIFICATION**

HPC45-LCD
45A
12/24V/48V AUTO
64V
96V
>18mA maximum
≤0.24V
≤0.16V
TTL232 level / RJ45 interface
35mm <sup>2</sup>
1.2kg

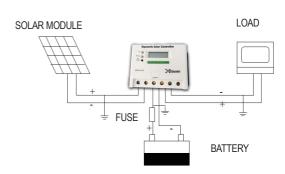
### **TECHNICAL PARAMETERS AND BATTERY TYPE**

	GEL	SEALED	FLOODED
Over Voltage Disconnect Voltage		16V	
Charging Limit Voltage		15.5V	
Over Voltage Reconnect Voltage		15V	
Equalize Charging Voltage	NO	14.6V	14.8V
Boost Charging Voltage	14.2V	14.4V	14.6V
Float Charging Voltage		13.8V	
Boost Reconnect Charging Voltage		13.2V	
Low Voltage Reconnect Voltage		12.6V	
Under Voltage Warning Reconnect Voltage		12.2V	
Under Voltage Warning Voltage		12V	
Low Voltage Disconnect Voltage	11.1V		
Discharging Limit Voltage		10.8V	
Temperature Compensation Coefficient (TEMPCO)*	-30mV/°C/12V (25°C ref)		
Grounding	Negative to the ground		
Working temperature	-20°C~ +55°C		
Storage temperature	-30°C~ +80°C		
Enclosure	IP30		

### **DIMENSION & SYSTEM ASSEMBLY**



www.hollandiapower.com



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