

Charge/discharge controller ENER 12

- Excellent reliability
- Battery charging by Pulse Width Modulation (PWM)
- LEDs to show the state of charge
- Protection against reverse polarity connection from the modules or the battery
- Low battery alarm
- Temperature compensation
- Robust, waterproof cabinet

The role of a controller is to optimize the charge and avoid the discharge of the battery in a photovoltaic system. This controller stops battery charging when a high voltage is achieved to avoid overcharging. Similarly, when it detects the battery low voltage, the loads are disconnected. When the battery is partially recharged, they are automatically reconnected. These functions enhance battery lifetime considerably.



	ENER 12	
	In 12VCC	In 24VCC
Nominal voltage	12V	24V
Max charge current	12A	12A
Max discharge (load) current	8A	8A
Voltage drop	< 0,3V	< 0,3V
High regulation set point	14,1V	28,2V
Alarm set point	11,7V	23,4V
Limitation set point (loads off)	11,4V	22,8V
Reconnect set point (loads on)	12,9V	25,8V
Nominal operation consumption	< 10mA	
Consumption when loads are disconnected	< 10mA	
Regulation type	P W M	
Temperature compensation of regulation voltage	Yes	
Common terminal	+ modules + battery + loads	
Normal operating temperature range	From- 20°C to +60°C	
Charge indicator	Blinking green LED	
End of charge indicator	Permanent green LED	
Alarm indicator (low battery voltage)	Blinking yellow LED	
Load cut off indicator	Blinking red LED	
Load overcharge indicator	Permanent red LED	
Protection against current surges	Electronic	
Battery fuse	Yes	
Protection against overvoltage	Yes	
Protection against reverse polarity connections	Yes	
Housing protection level	IP65	
Max cable section	2 x 6 mm ²	
Dimensions	180 x 130 x 60 mm	
Weight	420g	