



## MERLIN SOLARPLEX CHARGE CONTROLLERS

Put yourself in control with a Merlin SolarPlex charge controller tailored to meet your specific solar needs. Choose the standard PWM charge controller to ensure optimum performance of your solar panels.

The Merlin SolarPlex PWM Controller is designed specifically for off-grid solar systems, offering advanced features such as the ability to simultaneously charge two batteries and compatibility with both 12V and 24V systems.

The charging process has been optimised to extend battery life and enhance overall system performance. With comprehensive self-diagnostics and electronic protection functions, this controller serves as a reliable safeguard against potential damage caused by installation errors or system faults.

For optimal performance, it is essential to use a voltage regulator with all solar panels (excluding the 5W and 10W models), to prevent overcharging of the battery. We recommend the 10A PWM controller for panels up to and including 150W, and the 20A PWM Controller for panels up to and including 300W.

## - Protection

against reverse current, overload, open circuit, lightning surge, and deep discharge.

- Unique dual battery charging function.
- Efficient series PWM charging increases battery lifetime and improves solar system performance.
- 12/24V automatic recognition.





PART#	07-1602	07-1603
RATING	10A PWM	20A PWM
NOMINAL SYSTEM VOLTAGE	12/24VDC (AUTOMATIC SYSTEM VOLTAGE RECOGNITION)	12/24VDC (AUTOMATIC SYSTEM VOLTAGE RECOGNITION)
	6-36	6-36
BATTERY VOLTAGE RANGE (V)		
RATED BATTERY CURRENT (A)	10	10
CHARGE CIRCUIT VOLTAGE DROP (V)	≤0.26	≤0.26
SELF-CONSUMPTION (MA)	≤6	≤6
TEMPERATURE COMPENSATION COEFFICIENT	-30MV/°C/12V(25° REF)	-30MV/0C/12V(250 REF)
OVER VOLTAGE DISCONNECT VOLTAGE (V)	16V/32	16V/32
CHARGING LIMIT VOLTAGE (V)	14.6V/29.2	14.6V/29.2
EQUALIZE CHARGING VOLTAGE (V)	14.6V/29.2	14.6V/29.2
FLOAT CHARGING VOLTAGE (V)	13.8/27.2	13.8/27.2
OPERATING TEMPERATURE	-35°C TO +55°C	-35°C TO +55°C
OVERALL DIMENSIONS (MM)	135 X 70 X 35	135 X 70 X 35
MOUNTING HOLE SIZE (IN CASE)(MM)	3.8	3.8
TERMINAL SIZE	6MM <sup>2</sup>	6MM <sup>2</sup>
NET WEIGHT (G)	155	155