Power regulator board for use with the Metron2

This circuit board provides flexibility allowing the Metron2 to be easily connected to solar cells, external power sources and mains power supplies (when used in conjunction with additional parts). It ensures efficient and intelligent battery charging, helping you get the most out of your solar system.

Inputs:
- 2 x solar cells (max of 10 watt each)
- 12Vdc from external power source (not to be used in conjunction with solar cell)
- Screw terminals for 4 input connections (for the Metron2 inputs)

Outputs:
- To 6 volt lead acid battery with intelligent charging capabilities
- Power to the Metron2 (6 volts maintained (for Metron2)).

- Connect either solar cells or external power sources
- Maximise battery life and solar charging potential
- Pre-charge conditioning if the battery is in poor condition – it helps to bring the battery back to life
- Temperature compensation – the charge rate is adjusted according to the temperature of the battery. This means the battery is always charged at the optimal rate, maximising the battery life.
- Ability to monitor battery voltage on input4 of the Metron2 – switch selectable.
- LED indication (with test pushbutton) for battery status and DC in.
There are 3 ways to use the system:

**Solar system**
- Connect up to 2 solar cells
- Intelligent regulation, maximising battery life
- Temperature compensated
- Easy interface for sensors
- Option to monitor battery voltage on input 4
- Pulse charging to help recover from low battery voltages
- LED indication of status
- Simple battery replacement

**Mains power system**
- 110 to 230 Vac input
- Battery back
- Option to monitor supply voltage on input 4, therefore capable of providing ‘mains fail’ alarm
- Easy interface for sensors
- Simple battery replacement

**Externally powered system**
- 6 to 24 Vdc input
- Battery back
- Option to monitor supply voltage on input 4