

# PowerSTAR

## Solar Street Lighting Regulator



INGENIUM  
TECHNOLOGIES

**PowerSTAR is no more expensive than most conventional regulators, yet it:**

- Saves money
- Facilitates fine tuning
- Increases system life
- Makes maintenance faster and easier
- Improves flexibility, and
- Helps you help the environment

**Call 088 2456701 for information on our special introductory developer offer.**



**More power from the Sun when you need it most**

**PowerSTAR Maximum Power Point Tracking (MPPT) regulator**

### Power Gain

The greatest demands on solar street lighting systems occur in Winter. A time of shorter days and colder temperatures; Winter conditions used to predicate the ultimate size requirements and therefore expense of the Solar Cells and Batteries in Street lighting applications.

The PowerSTAR can increase power yield from Solar Cells by up to 30% in cold and overcast conditions giving the designer-integrator a critical edge, reducing cost and environmental footprint. Minimisation of Solar Cell size is also an advantage for high-wind area installations.

Maximum Power Point Tracking (MPPT) regulators were once only used in the most rarefied applications, but the cost-effectiveness and ease of use offered by the PowerSTAR changes all that. Test one and you will soon wonder how you got by without MPPT functionality.



## Power Software

The powerful and easy to use software available with the PowerSTAR takes tuning and diagnostic capability to the next level. The comprehensive data-set at your fingertips will allow you to improve designs as performance is neatly quantified. The vagaries of site specific variance will become a thing of the past as you review up to 400 days of performance data from a single download!

The powerSTAR dataset has been structured to facilitate speedy fault-resolution in the field. No tedious button pressing and slog, just port in to the PowerSTAR using a portable computer (or for larger systems the custom-designed PowerSTAR data logger) and review the neatly presented, intuitive GUI.



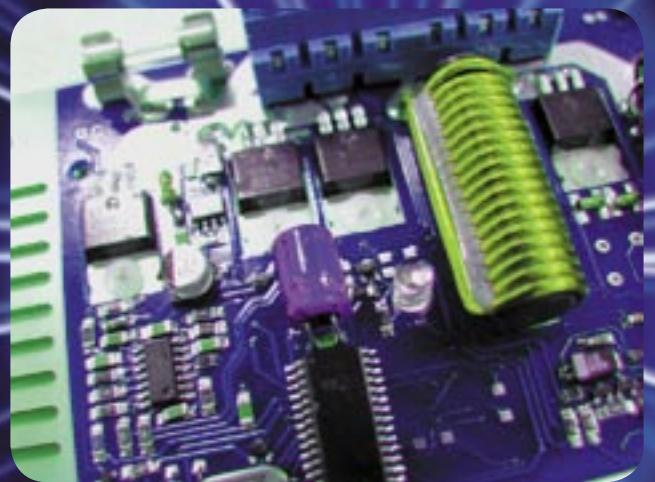
## Longer Life

At some point the battery component off all off-grid Solar Street lighting units will need to be replaced. The PowerSTAR offers a comprehensive set of custom settings designed to help you extend the life of your chosen brand and type of storage cell. The people who work in Solar technologies do so through a commitment to the environment and extending battery life is a critical element to both the economic and environmental imperatives.

## Love me tender

Now that MPPT's are available in such a cost-effective and comprehensive Street lighting tuned format, give yourself the edge in total system cost and reliability by incorporating the PowerSTAR in your design. Most opportunities in Solar Street lighting are run through competitive tender, so maximise your chances with PowerSTAR.

Don't take our word for it. Call for a development kit today. If the PowerSTAR isn't the best Solar Street lighting regulator you have ever used we will give your money back!



### Innovative Technology

PowerSTAR incorporates a number of innovative design features including:

- Microcomputer control
- Advanced tracking algorithms
- Flexible programmable modes
- Lighting timer control
- Automatic battery management
- Serial communications link
- On-board data logging
- Extensive diagnostics

### Technical Specifications

Dimensions: 145 x 80 x 27mm  
Connector: 6 way (Solar Panel +/-; Battery +/-, Load Output +/-)  
Max array power rating: 240W  
Max array voltage: 23V  
Battery: 12V sealed or flooded  
Tapered charge facility  
Battery equalise function  
Temperature compensation function  
Reverse polarity protected  
Lightning protection  
Temperature range: -10°C to 60°C  
Environmentally sealed packaging



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