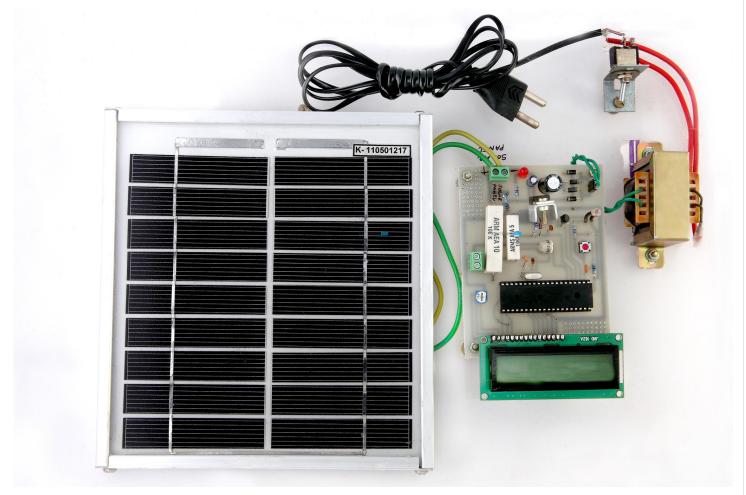






Home (/) - Solar Energy Measurement System

# Solar Energy Measurement System



Rs. 6,319.00

**Buy Now** 

## Kit Details

(https://store.electronicshub.org/pages/kit-

details)

**Get Rs.5,499/- Worth Electronics Courses FREE:** Order project kit before March 15th, 2017 and get 20 DIY project courses with codes worth Rs.5,499/- (http://courses.electronicshub.org/p/projects/)absolutely free!

The aim of this project is to measure solar cell parameters through multiple sensor data acquisition. In this project a solar panel is used which keeps monitoring the sunlight. Here different parameters of the solar panel like the light intensity, voltage, current and the temperature are monitored.

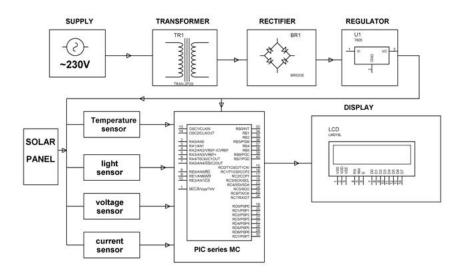
The microcontroller used here is PIC16F8 family. The light intensity is monitored using an LDR sensor, voltage by voltage divider principle, current by current sensor and temperature by temperature sensor. All these data are displayed on a 16X2 LCD interfaced to PIC micro controller.

The power supply consists of a step down transformer 230/12V, which steps down the voltage to 12V AC. This is converted to DC using a bridge rectifier. The ripples are removed using a capacitive filter and it is then regulated to +5V using a voltage regulator 7805 which is required for the operation of microcontroller and other circuits.

### PROJECT HIGHLIGHTS

- Easy to use, Self-explanatory kit.
- · All-inclusive solution kit.
- Extensive audio-visuals available.
- · Branding-free material.
- Pre-programmed Microcontroller.
- Multiple Solar Parameter Measure.
- Call/mail for Tech Support from 10 am 7 pm.
- Can be Customized for Arduino, Raspberry Pi, PIC

### BLOCK DIAGRAM -



## Hardware Requirements

- PIC16F8 series MC
- Solar Panel
- LCD
- Transformer
- Diodes
- Voltage Regulator
- Resistors
- Capacitor
- LED

## Software Requirements

- MPLAB & CCS C compiler
- Language:Embedded C or Assembly

#### PROJECT RESOURCES -

 $Project\ Abstract\ (https://s3.amazonaws.com/shopify-custom-fields/electronicshub-noises) and the project Abstract (https://s3.amazonaws.com/shopify-custom-fields/electronicshub-noises) and the project (https://s3.amazonaws.com/shopify-custom-fields/electronicshub-noises) and the project (https://sa.amazonaws.com/shopify-custom-fields/electronicshub-noises) and the projectronicshub-noises (https://sa.amazonaws.com/shopify-custom-fields/electronicshub-noises) and the projectronicshub-noises (https:$ 

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#### GET 100% ASSURED SUCCESSFUL RESULTS

A simple and effective plan that assures you the best scores, a plan that gives you time to read, learn, practically experience the whole workings of your project and create a successful unit you can proudly showcase. And the best part is this... even if your own project unit malfunctions... you will still have a ready-made project unit for yourself, just in case there is a last minute issue that you or your teammates could not solve. Confused? Well let me explain.

Plan A: Create A Successful Project Model By Yourself

Plan B: Have A Expertly-Made & Quality-Tested Replica Of Your Project For Assured Results

So here's how it works.

In my engineering days, we used to struggle replicating a PCB model from our text books with real tools. We had a tough time with the circuits and most of the time - they used to fail. So I wanted to solve this problem not just for myself but for all my fellow students like you. Young, energetic and knowledgeable youth who really want to learn but still cannot afford to fail with the project because it matters and the colleges rarely help us out productively.

So I want to give you a beautiful DIY model of the project that also includes:

- 1. A Complete set of tools, circuit diagrams, tested PCD, zero board, audiovisuals and everything else you will need to execute your project to perfection.
- 2. A ready-made unit of the project itself, so that you can actually see, test and learn in real-time and if by any chance you could not complete the unit by yourself can submit this unit for an assured first-class score.

Sounds like a dream? Well, yes it is and here's how you can benefit from this project not just in your final year but also help you with your interviews and in the future too.

USER REVIEWS =



"I live in Hyderabad, a place that is known for engineering colleges. Went with frnd and bought a set from Ameerpet(tht hs rdymade stuff like this) and it failed just b4 viva. Thats when we got this thx to a senior who is sorta like a geek.. and let me tell u.. Its one reason why me and my frnds got thru the final sem. Works great and is useful too later.."

Ravi Teja Order No: HYF1290



"A must-buy. It helped me practice in real time and learn how to make a project by looking at an actual workable unit. (fyi - you get a fully built unit and another full set of components to build another by yourself) so it was great value for us. We shared the costs by 3 (our team for the project) but i got to keep my unit as the other two kept the original. Showed it for my on-campus and got thru too because it not just looked neat and profesionally bt worked great later. (still have it in my room, now working with GE in Bangalore) "

Anusha Order No: BLR2933



"We have used it for our institution - it is available in lab and has been good for explaining various models in live during class. Strongly suggest every college dept to have it for labs as it is working well - even with regular use at lab for more than 1 year. Note:We got the unit complementarity before launch in 2014 and have later purchased few batches. The team behind it is professional and know what electronics students need and i am writing this review on their request on 13/05/2016"

## Mr. Ramesh Kumar Iha