




Product Name	IoT based Solar power generation monitoring system
Category	Internet of Things
Product Pictures	
Product Scope	To read all electrical parameters like voltage, current, generated power, etc. from a Solar inverter and sending it to a server/website in real time for IoT monitoring system.
Need/Problem statement	<ul style="list-style-type: none"> • Solar power stations are mostly installed in remote areas • Frequent technical failures occur • Due to remote locations power failures are identified very late • Real time monitoring of potential failures can help solve the problem a lot • Total power generation real time data also helps to quantify Return on Investment (ROI)
Product Details	DC power generated by Solar Panels is converted to AC power using Solar Inverters. Most such inverters provides a communication port to read electrical parameters of power generations. We developed a custom product which can communicate to these Solar inverters via RS485 communication protocol. In real time this data is posted to a remote server using GPRS network. Sim-card can be inserted in the product. If RS485 port allows some controls, our product can also support controlling inverter parameters from server or user website.
Technical Keywords	RS485 Communication, RJ45 port, Micro-controller, GPRS, HTTP, SIM CARD