

**PORTABLE AUTOMATIC CLOTHES DRYER RACK  
POWERED BY  
BATTERY OF SOLAR CHARGER**

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## **ABSTRACT**

This thesis describes the design and construction of an automatic cloth dryer system model using a PIC 16F877A chip. The PIC chip is programmed to control the operation of clothes dryer system when it is raining day or when the surrounding started to become dark. The study is based on the principle of sensor detection and then the system is programmed to cover the clothes when it's getting feedback from the sensor. The methodology of the project was started by constructing the model of the project. After that, design the circuit in Proteus software and do the programming in MPLab. Next, after the circuit has completely designed and the PCB (Printed Circuit Board) had done, the components were soldered and finally the evaluation and troubleshooting takes place. The idea of this project is the rain sensor detects the rainwater and automatically covers the clothes. LDR (Light Dependent Resistor) sensors also used to detect light intensity of the surroundings. The result shows that the system automatically covers the clothes when the surroundings started to become dark or the rain sensor plate detects rainwater.

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