FACULTY OF ELECTRICAL ENGINEERING

UNIVERSITI TEKNOLOGI MARA

PULAU PINANG

FINAL REPORT :

AUTOMATIC PLANT IRRIGATION SYSTEM BY USING SOLAR POWER

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This report is submitted to the Faculty of Electrical Engineering,

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This report is approved by :

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TABLE OF CONTENTS

CHAPTER 1
INTRODUCTION

1.1 Background of Study

Solar power source are come from the sun either directly as thermal energy or through the use of photovoltaic cells in solar panels and transparent photovoltaic glass to generate electricity. Solar battery charger is a natural energy that can save money of paying electricity bill for a long term of benefit. The irrigation system is defined as a system that distributes water to targeted area. The efficiency of the irrigation is based on the system used. Since antiquity, the human life is based on agriculture and the irrigation system is one of the tools that boost agriculture.

Plant irrigation system also known as a watering plant system that is use to watering plant at home. Automatic plant irrigation system using solar power is a project that can make gardener life's easier. Automatic irrigation system provides the solution for watering the plant at home automatically even in the absence of human. People does not need to watering their plant anymore when its need water. The main purpose of plant irrigation system is to ensure that the plants are grown in the fertile condition. The system of plant irrigation system was controlled by using the soil moisture measuring sensor which controls the flow of water so that it can save water use in the house.

1.2 Problem Statement

Most people nowdays are very keen to grow plants. In recent times, everyone was busy with daily schedule. By using automatic plant irrigation system it can give benefits to all gardener out there. The plant will have enough of water and it is always in good condition. With this automatic plant irrigation system, gardener does not need to waste their time to watering plant. They can spend more time with their family. Besides, this project is using natural energy which is solar panel. Lastly, for long term of benefit it can save money of paying electricity bill.