

# **HIGH EFFICENCY SOLAR BASED MICRO DRIP IRRIGATION SYSTEM**

*A socially relevant project report submitted in partial fulfillment of the  
requirements for the award of the degree of*

## **BACHELOR OF TECHNOLOGY IN ELECTRICAL & ELECTRONICS ENGINEERING**

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**CERTIFICATE**

This is certify that the project report entitled “**HIGH EFFICENCY SOLAR BASED MICRO DRIP IRRIGATION SYSTEM**” is a bonafide work submitted by **Y. DEVI PRASAD, K. BALA MURALI , S. NOOKARAJU, U.DEVA and M. SUMANTH** in partial fulfillment of the requirements for the award of degree of

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## **ABSTRACT**

The agriculture plays the important role in the economy and the development of the country. Irrigation is one of the major requirements of agriculture which requires abundant electric power. Solar powered drip irrigation system can be suitable alternative for farmers in the present state of energy crisis. The proposed drip irrigation system uses solar power for irrigation. Solar powered water pump operates automatically based on different soil parameters like Moisture and Temperature. The most significant advantage of a highly efficient solar based micro drip irrigation system is that water is supplied only when the moisture in soil is identified as low and the flow of water is controlled by valve with the help of moisture sensor to enhance crop productivity. This project focuses on the convenience of the farmers by making the system is to switch between electricity board and solar panel.

Keywords: - Irrigation, Solar Power, Moisture content, GSM control, Solenoid valve.