

244. MICRO CONTROLLER BASED AUTOMATIC PLANT IRRIGATION SYSTEM USING WIRED SENSORS AND GSM MODULE

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Automatic Irrigation system was developed for the agricultural crops. This system has wired sensor network of temperature sensor, soil moisture sensor, light sensor. A controller is an integral part of an irrigation system. These are placed in the field. It is an essential tool to apply water in the necessary quantity and at the right time to sustain agricultural production and to achieve high levels of efficiency. When the temperature level exceeds the limited level and moisture content of the soil is below the limited level, the DC motor gets ON automatically, and after the moisture content level reaches the normal level the motor gets OFF automatically. Light sensor is used in the case of indoor plants. A GSM module is connected with the controller unit. When the water requirement is needed, even though the field in the normal moisture level can switch ON and OFF the motor by sending a message to the controller from anywhere of the world through the GSM. The keil software is used for simulated result. Index Terms -Irrigation, wired sensor network, water resources, GSM module, DC motor.

Journal of Science and Innovative Engineering & Technology