

Design and construction of a drip irrigation system using a moisture sensor

Hoang Manh Luc

Abstract: In the urgent context of water conservation and improving agricultural efficiency, this topic focuses on building and designing an automatic drip irrigation system based on moisture sensors. The main objective is to solve the problem of rational water allocation and optimize crop productivity in agricultural areas. The research method combines theory with experimentation, including designing a control algorithm for the irrigation system and deploying the application in a real-world field. The expected result is a sustainable solution that improves production performance while saving precious water resources.

Keywords: drip irrigation, humidity sensor, high-tech agriculture, water management