

11. Sensor Calibration and Installation

Introduction

Soil moisture sensors are an important component of wireless sensors networks. They monitor the moisture status of soils/substrates and provide feedback, which can be used to aid/automate irrigation decisions. In this way, soil moisture sensors can improve existing irrigation systems and increase irrigation efficiencies. For these benefits to be achieved however, soil moisture sensors need to be calibrated for the specific soil/substrate in which they are to be used, and proper installation techniques need to be followed. In this module, we will describe many of the soil moisture sensors provided by Decagon Devices, Inc. (Pullman, WA). We will illustrate simple calibration techniques that can be followed for these sensors and important points to consider during their installation.