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EcoDuino - An Auto Planting Kit

SKU:KIT0003



INTRODUCTION

EcoDuino is evolving. Now the EcoDuino has a new enclosure. It is protected from water splashes, so it is safe to use beside your plants. The EcoDuino now sports an Atmega32U4 which eliminates the requirement of an adapter. And sketches can simply be uploaded via Micro USB just like Arduino [Leonardo](#). Another improvement is that the [DS18B20 sensor](#) is now directly supported.

EcoDuino is designed by DFRobot to help you grow plants. By using a series of [microcontrollers](#), [sensors](#) and [actuators](#), the EcoDuino system can make your efforts to grow plants much easier.

In this system, sensors are used to collect data which can show you plant conditions like temperature, humidity, light intensity, etc...

If you want, EcoDuino can message you and tell you how your plants are doing through [wireless communications](#). It will also water your plants automatically when they are thirsty, or at a pre-determined interval. The only thing you may need to do is manage your EcoDuino system through a PC with a graphic user interface.



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The cool thing about the EcoDuino is that it is developed based on Arduino which means you can not only program EcoDuino in Arduino IDE environment but also use any Arduino compatible hardware in your EcoDuino system.

SPECIFICATION

- Board power supply: 6~12V DC
- Micro controller: Atmega32U4 (Bootloader: Leonardo)
- 4 Analog I/O ports, 5 Digital I/O ports
- Terminal for interfacing a Carbon rod(Soil moisture sensor)
- Terminal for interfacing a DS18B20 temperature sensor(Soil temperature sensor)
- Terminal for interfacing a motor or a solenoid valve
- Potentiometer to set the threshold soil moisture value of watering
- Xbee slot
- Micro USB
- 3.5mm screw terminal
- Board dimensions: 75 x 50 mm
- Diving pump power supply: 4.5~12V DC
- Pumping head: 200cm
- Flow capacity: 100-350L/H
- Power range: 0.5W-5W
- Pump dimensions: 38x38x29mm
- Pump weight: 125g