

## Abstract

In this project, we made a force sensor with plastic optical fiber and bought an IR sensor to detect objects movement and a humidity and temperature sensor to detect the humidity and temperature of farm. In general, the sensors send the humidity and temperature signal to the Arduino, and through the Arduino Wifi Shield sends data to 3G network of cell phone. By application program (APP), and we use the pad or cell phone to receive data. In case of some entrance detected, the system will send messages and dial phone to the user, and then power on the image recorder to record the image of farm automatically. Even though the user doesn't use smart phone, the system also works instantly. So, the remote monitoring and anti-theft system can be applied widely.