

Sales Pitch

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About the Device

Waste receptacles are a mundane, yet non-negotiable feature of day-to-day life for private households, municipal bodies, and businesses alike. Even more mundane and non-negotiable is the task of monitoring their capacity in order to know when they should be emptied. To ask a scary question: How much time, money, plastic and manpower is wasted, every year, on superfluous emptying of waste containers that could've gone another day, or week, before being emptied? The WasteFULL IoT device offers a solution to this pattern of wasteful waste management.

WasteFULL utilizes two HC-SR04 ultrasonic distance sensors to remotely monitor the volume of waste in a receptacle, and report when the container needs to be emptied. Onsite, the device's assessment of its receptacle's content volume can be viewed on a QC1602A LCD display. While from a distance, the device's cloud connectivity capabilities enable it to publish this data on a website.

Cloud Connectivity

The interactive website offers the user two ways of customizing WasteFULL to their needs. First, the website allows the user to enter their trash bin height. This ensures that the photon converts distances read by the sensors to percentages correctly. Second, is the ability for the user to change the maximum capacity variable. Maximum capacity refers to the capacity that must be reached for the photon to send an email to the user, notifying them that their trash is full. The user may wish to change this variable if, for example, they would like to be notified when their trash is 70% full instead of 90%. WasteFULL employs IFTTT to send the email to the user once the trash has reached the user defined maximum capacity.